

My Dear Mumford
from Claire

THE
AYAR-INCAS

“For, we are stepping far and fast. The signs of the time are all around, and they who list may read. The handwriting is on the wall; the fiat has gone forth; the ancient empire shall be subverted; the dominion of superstition, already decaying, shall break away, and crumble into dust; and new life being breathed into the confused and chaotic mass, it shall be clearly seen that from the beginning there has been no discrepancy, no incongruity, no disorder, no interruption, no interference; but that all the events which surround us, even to the furthest limits of the material creation, are but different parts of a single scheme, which is permeated by one glorious principle of universal and undeviating regularity.”

HENRY THOMAS BUCKLE, *History of Civilization in England.*



THE AYAR-INCAS

By

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FORMER UNITED STATES SENATOR,

LATE AMBASSADOR TO PERU. F.R.G.S., ETC.

VOLUME TWO

Asiatic Origins

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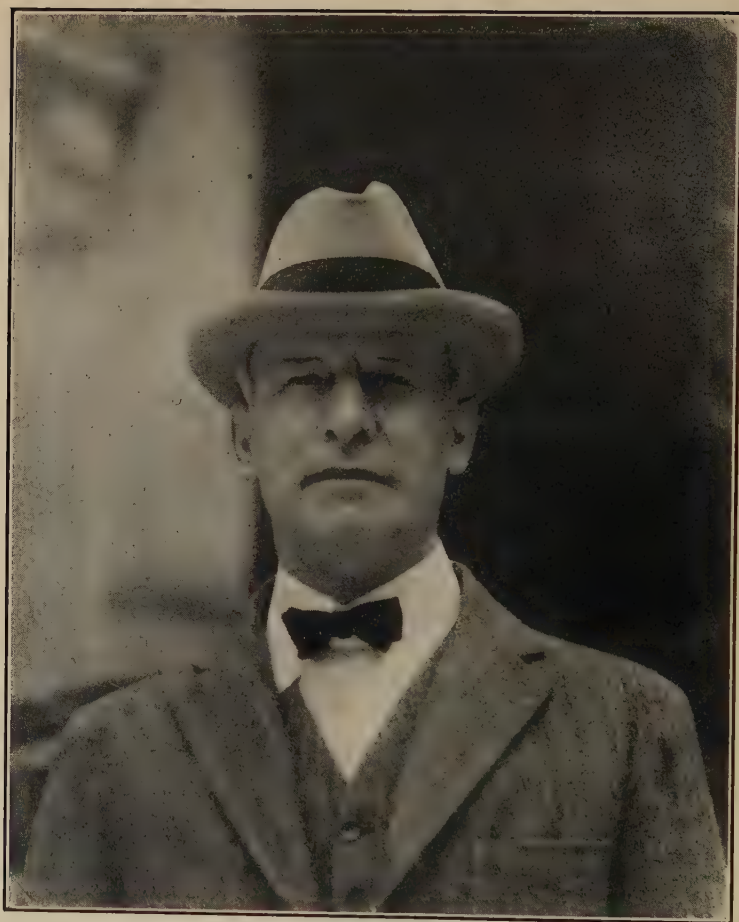
1930

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THE AUTHOR

PREFACE TO VOLUME TWO

ANTHROPOLOGISTS and ethnologists have not yet discovered the origin of the white race. Is the great Aryan white race which has evolved the arts and sciences of civilization and ruled the greater part of the world throughout history an original product from the archaic pre-human ancestors of man?—or was it gradually developed by the slow changes of environment, or by albinism, from an older black or brown race? These questions science has not answered.

It is evident that most of the Asiatic and all of the pre-Columbian American races were mixtures in varying degrees of the black or brown and white. This process of amalgamation has been the dominant circumstance affecting the evolution of cultures. Nevertheless it has been much neglected and is little understood. The degradation of the blood of the ancient white Aryan leaders from whom came the origins of much of the culture of pre-Columbian Mexico and Peru accounts for the marked decline of that race, at least in stamina and in what we call *character*, if not in general culture, before the arrival of the Spaniards.

The white race itself—the conquerors of India, the founders of its institutions thousands of years before the arrival of the British—has disappeared in native India, completely lost (except for a few rare survivals) in the

mixture with the "dark peoples." In China, though not so completely lost, the white race was merged and changed into practically another race thousands of years ago.

The same process has modified most of the white peoples on the Mediterranean. It is today in active operation in France, in Latin America, in the United States. The Gothic blood of the conquerors of Peru, already diluted by the Moors, is being rapidly absorbed by the darker indigenous peoples just as was that of the white Ayar-Incas before them.¹

We have been too apt to assume that the history of our own part of the world was the history of the world. The psychology of our attitude in this respect was only another phase or another instance of the general attitude of the human race from its primitive beginning almost to the present moment.

The world was limited to one's own little neighborhood. One's own little tribe constituted the human race. This was often shown by tribes naming themselves *Men*,—as though they were the only men. At first this was to dis-

¹ The same struggle between white and colored remains today at the bottom of Asiatic and African politics. "The mere fact of the gathering of 174 delegates in the Mirror Gallery of Egmont Palace at Brussels as men of the Oppressed Nations is a sufficient proof of the earnest revolt of the colored against the white dominance of the world." Ikbal Ali Shah, in London *Outlook*, cited in *Literary Digest*, August 13, 1927. This writer also calls attention to the Pan-Asiatic Conference at Nagasaki in 1926, the Pan-African Congress of Paris, and the annual meetings of the Indian National Congress.

Most of those who are rated today as the colored races participating in these futile protests against the dominance of the white race, are the mixed product of an earlier struggle of the same kind in which the small number of the white Aryan ruling caste were absorbed in the darker mass. The part which this struggle played in the evolution of prehistoric American culture has been largely overlooked.

tinguish themselves from animals rather than from other tribes. When some culture had been attained by a people—e.g., the Greeks—they looked upon all others as barbarians. This not only indicated a good deal of racial conceit but racial ignorance of ancient civilizations from which, as a matter of fact, they had derived their own culture.

As man's mind expanded so that he had a somewhat wider intellectual horizon and could see a little beyond his own neighborhood, the same egotistic psychology appeared in his conception of the planet on which he lived. It was the center of the universe and the sun revolved around it. With the same inherent racial sense of "being the whole thing" we have generally assumed that our so-called Indo-European language stock was the only offshoot of the Proto-Aryan mother race, and that there were no Aryan migrations to America except those of our own European branch. This was only due to our inherent psychology of self-absorption and a lack of knowledge of what had been going on upon the Pacific long before our own civilization had been developed.

MILES POINDEXTER.

Lima, Peru,
March 1, 1928.

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THE AYAR-INCAS

VOLUME TWO

Asiatic Origins

I

MAN'S FIRST APPEARANCE IN AMERICA

MAN reached America from Asia 50,000, perhaps 100,000, years ago, or even earlier. His remains have been found in the Pleistocene deposits of Argentina and Brazil.¹

A century and a half ago Bishop Usher's dictum that the world was created about 4004 B.C. was generally accepted. A maximum of between 20,000 and 100,000 years since it became possible for human life to exist on the earth, is still suggested by some scientists.

As man accumulates knowledge,—which he has been doing at an accelerated rate during the last half-century,—the world in turn ceases to be so vague, indefinite, and vast. With children a year is an age. Three or four years is an inconceivable infinity of time. As man's mind develops and reaches out in the matchless mastery of

¹ "Ethnology and Ethnography," *Encyc. Brit.*, 11th ed., IX., 849.

The recent discovery by the Smithsonian Institution of remains of man in Florida contemporary with those of the mastodon and other extinct animals, corroborates the conclusion that the age of man in America is much more remote than has been supposed. (*Literary Digest*, Oct. 31, 1925.)

"In the more recent accumulations of limestone shells, lying above the mammoth and human bones, were found fragments of pottery, while in the sand below the elephant layer were discovered the teeth of horses, camels, and saber-tooth tigers typical of the Pleistocene period of 50,000 or more years ago."

The great deeply buried shell-heaps and kitchen middens recently discovered on the North Pacific coast, about Juan de Fuca Strait and the lower parts of Puget Sound, also indicate the immense antiquity of man's residence there.

Los Angeles, August 2 [1929].—Bones of prehistoric animals that roamed the southwest 250,000 years ago, recently found in excavations in New Mexico, were termed "the most important historic discovery ever

nature by the human intellect, he better comprehends time and space; the universe comes more within the reach of thought; proportions and distances adjust themselves, and we see ourselves in our true place in relation to the past.

Man is now known to have been upon the earth for at least three hundred thousand years.² As human knowledge increases, the date of man's appearance will probably be extended to 1,000,000 years ago, or even beyond our reckoning.³

made in America," by Dr. William A. Bryan, director of the Los Angeles county museum in a report before the board of supervisors today. . . .

A ground sloth, large camel, prehistoric horse, cave bear, and other extinct animals were found by Roscoe P. Conkling of El Paso, Texas, last January.

Conkling was searching for buried Spanish gold in a cavern in the lower slope of Bishop's Cap peak near Mesquite in southwestern New Mexico, when he made the discoveries. . . .

Dr. Bryan said that in his opinion the cavern was a den for wild animals during the Pleistocene age. . . . A human skull also was found in the cavern with the remains of the animals.

"The findings settle conclusively," Dr. Bryan said, "the moot question as to whether man and these animals were coexistent in America at that time."

Eastern geologists and paleontologists, Dr. Bryan said, have pronounced the discovery in the cavern to be of far-reaching importance to science, following their visits at the scene of the excavation.

Associated Press dispatch in *Spokane Spokesman-Review*.

² Jacques de Morgan (*Prehistoric Man*, p. 12 *et seq.*) cites numerous anthropologists as estimating the age of the Chellean man at 300,000 years. Professor Hermann Klaatsch (*The Evolution and Progress of Mankind*, p. 274) says: "The earliest Chellean implements must have had a long series of far cruder predecessors."

Sir Arthur Keith (basing his opinion on the verdict of Professor Sergi, University of Rome, as to the authenticity of the finding of human skulls at Castendolo by Professor Reggazoni in 1860) thinks it probable that man as he is today, with skull and brain capacity already highly developed, existed in the Pliocene age.

³ "The first appearance of man, though comparatively recent, is positively so remote, that an estimate between twenty and a hundred thousand years may fairly be taken as a minimum. This geological claim for a vast antiquity of the human race is supported by the similar claims of prehistoric archæology and the science of culture, the evidence of all three departments

In the long process of evolution, as early man gradually spread over the American continent, carrying with him his rude arts, the magic and religious animism of the earliest Stone Age, there were a thousand modifications and specializations brought about by environment. In later ages there were slight infusions of a totally different blood by way of the Atlantic,⁴ but not enough, even in the many centuries through which these infusions took place, to substantially change the general Asiatic type.

The great related Quichua, Pano, and Araucanian races,—of the Peruvian highlands, the eastern bases of the Andes, and the Chilean sierras, respectively,—had brought from the north their rude, early culture long before the erection of the ornate temples of Mexico and Central America or the stupendous megalithic structures of Peru. They had displaced still earlier primitive indigenous peoples and were themselves subjected to many invasions and conquests. Among the various tribes there was much expulsion, absorption, and destruction. Successive migrations infused new blood and many modifications of culture.

The earlier pyramidal temples and altars of the north had their grander counterparts overlooking the stupendous gorges of northern Peru. Long before the decorative architecture of the splendid Mayan altars, tombs, and

of inquiry being intimately connected, and in perfect harmony." E. B. Tylor, "Anthropology," *Encyc. Brit.*, 11th ed., II, 114. Dr. Henry Fairfield Osborn "asserts . . . that man appeared upon the earth with the creation of the first great plateaus in Central Asia, perhaps 1,250,000,000 years ago." *Literary Digest*, Jan. 25, 1930, p. 24.

⁴Leo Wiener, *Africa and the Discovery of America*; Charles H. T. Townsend, "Ancient Voyages to America," *Brazilian American* (1925) Vol. XII; Icelandic Sagas, etc., etc.

temples of Yucatan and Guatemala had been developed the megalithic fortresses and altars of less ornate architecture but incomparable masonry had been erected on the heights of the Vilcanota in southern Peru.

The Mayan architecture is held to be inspired in part, at least, by the ornate Buddhist temples of Indo-China. The civilization of Cambodia and Indonesia as well as that of pre-Columbian Mexico and Central America is said to have reached its culmination during the period from the seventh to the twelfth century A.D.;⁵ but there was an archaic culture, with arts which had attained a high degree of perfection, in Guatemala, Yucatan, on the Mexican plateau, on the dry and temperate coast of Peru, and on the higher plateaus as well as the middle altitudes and valleys of the Peruvian Andes thousands of years before that era.

It is important to avoid confusing the migrations, folk-movements, conquests, and settlements with the "culmination of the civilization" of these regions. The "dim beginnings of a time" had preceded the ornate tombs and temples by many ages. Other cultures had been slowly evolved, then destroyed by war or pestilence. On the ruins of these, new powers had established themselves, driven out or enslaved the old populations,—new epochs of prosperity, new religions, new arts, borrowing from the old, implanted new tongues and new cultures. Visitors from across the waters brought stories of strange gods. Some of these new teachers became leaders and chiefs,—were accepted as the bringers of knowledge,—and came in time to be regarded as incarnations of God.⁶

⁵ G. Elliot Smith, *Elephants and Ethnologists*, pp. 107-08.

⁶ In Smith's *E. & E.*, p. 99 *et seq.*, and other works cited by that author, there is a discussion of some phases of this question. He cites, as an instance,



MEGALITHIC IDOL AND ALIGNMENT, TIA-
HUANACO

Accidental double exposure of the film.

Samoa and Tonga were older colonies and the legendary nurseries from which many of the other islands were peopled. But the dates given by Quatrefages were based on the lineage of the chiefs as preserved in the tribal songs, by counting the generations whose history was preserved in these traditions. These songs, however, related only to the genealogy and achievements of the line of kings whose last representatives still ruled the islands when they were first visited by Europeans; and took no account of previous dynasties which had been overthrown, nor of earlier races of Polynesians which may have passed on to other islands farther to the east or been absorbed by later comers prior to the arrival of the people whom the Europeans encountered.

The Maori tradition is: "The seed of our coming is from Hawaiki; the seed of our nourishing, the seed of mankind."

"There is some evidence that the 'tradition of the six canoes' does not represent the first contact of the Polynesian race with New Zealand. . . . The extraordinary ruined fortifications found, and the knowledge of the higher art of war displayed by the Maoris, suggest (what is no doubt the fact) that there was a hard fight for them when they first arrived."⁷

"The culture of San Cristoval in Melanesia definitely belongs to the Pyramid phase of culture in Egypt, roughly 2600 B.C.; and even if some centuries are allowed for the statuettes, with features characteristic of Hindu culture, discovered by Mrs. Zelia Nuttall in her garden in the city of Mexico under a stratum of lava "supposed to have been ejected from the volcano approximately two thousand years ago."

Quatrefages places the colonization of the Marquesas from Tonga at about 419 A.D., and of Hawaii from Tahiti at about 701 A.D. *Les Polynésiens*, p. 168.

⁷ Article, "Maori," *Encyc. Brit.*, 11th ed.

diffusion of customs and beliefs step by step from Africa to the Solomon Islands—although the purity of the culture suggests that the spread could not have been unduly delayed—we can be confident that western culture was playing a part in the threshold of the Pacific at least a thousand years B.C.”⁸

But this leaves altogether out of consideration the great race which built the megalithic works of finished masonry on a Cyclopean scale in New Zealand, the Caroline Islands, Easter Island, and Peru. These tremendous monumental records of megalithic man’s residence in Polynesia, his passage across the Pacific, and the construction of his temples in the Andes,—of huge stones moved long distances, perfectly cut and joined without mortar, as though they were the work of a prehistoric race of Titans,—date back to a megalithic age of a white Parent-Aryan people which developed at least the early stages of its megalithic culture much earlier than the pyramids of Egypt.⁹

⁸ G. Elliot Smith, *Elephants and Ethnologists*, p. 101, citing W. H. R. Rivers, *Psychology and Politics*, p. 129 *et seq.*, of whom Smith says: “With clear vision and sound judgment he has established the case for the early peopling of the Pacific and for the diffusion of culture to America before the commencement of the Christian era.”

⁹ “After these early ‘Melanesian’ wanderers had been in occupation of the lands they had discovered for some time, a new period of migration set in, bringing to the western margin of Polynesia a new group of mixed peoples of quite a different character. These newcomers, who were probably relatively few in numbers, came down from the north by way of the Ellice and Gilbert groups rather than from the west by way of Melanesia. They were, in the main, of Caspian [white Caucasian—M. P.] type but with minorities of other dolichocephalic forms.”—Dixon, *infra*.

These last may have been and probably were black slaves brought along as crews for canoes and employed in the megalithic works.

“Spreading first to Samoa and Tonga they followed the trail of the earlier migrants eastward, one little group again making its way as far as Easter Island. . . . The third and last period of migration which played an important part in the peopling of Polynesia brought again a new type. This last movement, which was probably as late as the early part of the Christian era, was in the main Alpine in type. . . . These latest comers were the ‘ancestors’ whose long migrations are yet dimly remembered by the Polynesian people.”—Roland B. Dixon, *Racial History of Man*, p. 385.

II

THE ORIGIN OF THE *INDIANS*¹

FROM East Cape, Asia, to Cape Prince of Wales, America, across the shallow waters of Bering Strait, is a short fifty miles. From the islands in the strait the mainlands of the two continents are visible on a clear day. From pre-historic times this route has been the highroad of trade, adventure, migration, and war for the hordes of the adjoining mainlands. In the summer easily navigable by the great canoes of the seagoing tribes, in winter frozen solidly over and covered with snow, it is quickly traversed by the swift dog-teams of the north. Not only man but many other creatures pass freely back and forth over its frozen fields, and those of the adjoining seas. The wild reindeer (called caribou in America) and the bighorn sheep have ranged over its surface, and the same species have populated vast areas in both continents.

Likewise with man, there is a continuous kinship and identity of race around the rim of Bering Sea from Kamchatka to the Tlingits of the Alaskan coast.

Another easy route for those seeking to avoid enemies or in search of better hunting and fishing grounds is the long chain of islands from northern Japan to the point of

¹ The Spanish use the words *indios* and *indigenes* interchangeably. This is a curious accident of association of words of apparently utterly different origin disclosing an identity of root form and meaning. Note the presence in our word *indigenous* of the Latin root *indu* (within), as in *Hindu*, *Indus*, *India*, of Paleo-Aryan origin.

the Kamchatkan promontory and from the center of that important Asiatic extension, by way of the warmer Aleutians, peopled by an Eskimoan race, apparently of the same stock as the Japanese, to the point of the far westward projection of the Alaskan peninsula. Many incursions and infusions, migrations of families and races, have followed these routes, fought or fraternized, sent out new colonies, multiplied or become exterminated, since the uneasy stirring of the fierce family of man sent its branches forth towards Europe and America from its ancient Asiatic home. The close proximity of Asia and America and the easy passage between them practically united the continents of the world into one continuous land mass, affording an opportunity for the spread of mankind and its primitive culture from a common center to the four quarters of the earth.²

Between the two capes, halfway across Bering Strait, are two granite islands, Nunárbook and Ignálook (called by the white geographers the Diomedé Islands), inhabited by a tribe of Eskimo traders, middlemen in the intercontinental barter. It is a land of fog and ice; but in the spring when the ice "goes out," in the seas where the warmer currents of the Pacific meet and mingle with the

² "That there was a land connection by way of Bering Strait and the Aleutian Islands, and that this was a highway of travel to and from the two continents, has been definitely established."

Report of American Museum of Natural History, 1923, p. 119.

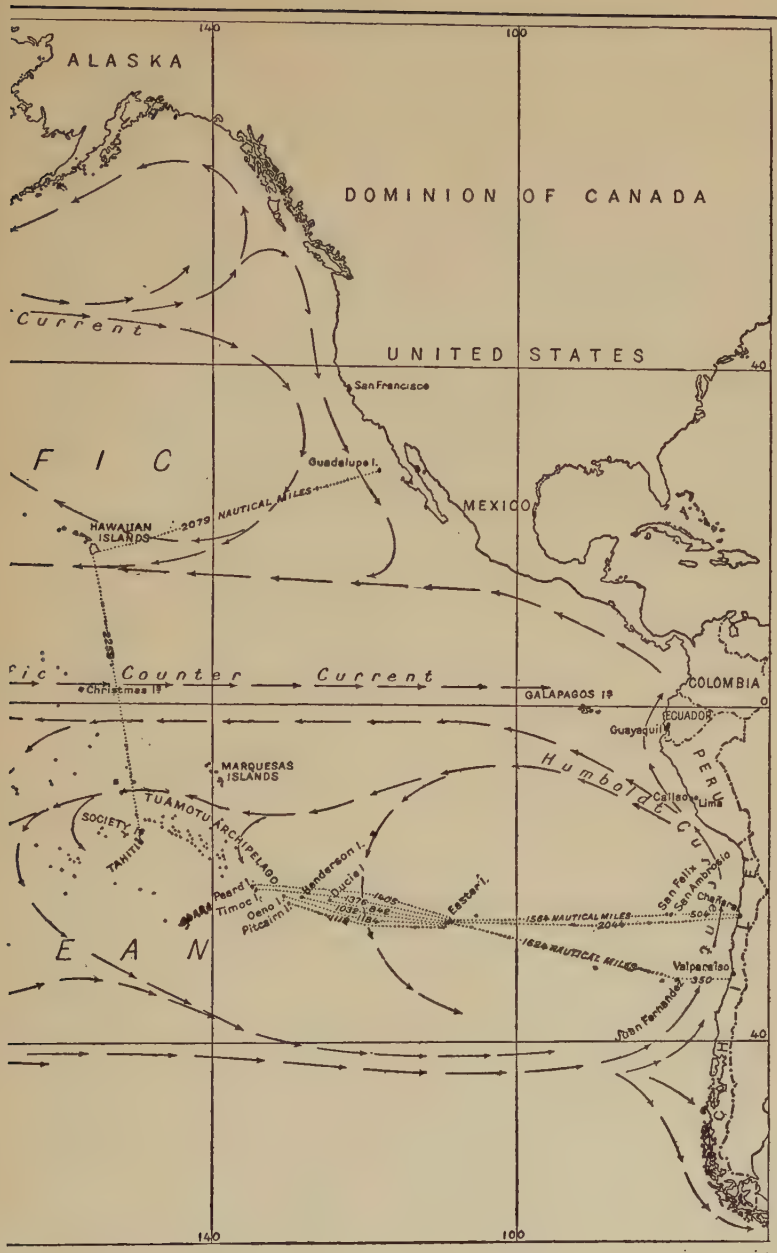
"Some of the most interesting burial caves in the world are to be found on the Aleutian chain of islands extending westward from the coast of Alaska. These islands formed one of the earliest routes of travel between the continents which are now designated as Asia and North America. They are volcanic in origin and abound in caves, many of which contain mummies untold thousands of years old."—Anna W. McNeill, in *Stone and Webster Journal*, Vol. XLIV, p. 681 *et seq.*

ice-bound waters of the Arctic, there is a riot of life. The sea becomes alive with its floating gardens of infinitesimal plankton on which countless hordes of small fishes feed, followed in their turn by larger fish, innumerable birds, seals, sea-lions, and walrus. Upon the rocks of the islands and the mainland vast colonies of gulls, terns, and petrels rear their young; and among the oozy swamps and tundra of the arctic shore, green with vegetation and swarming with life in the long summer day, millions of geese, ducks, plover, and snipe have their teeming nests.

Living is easy here for primitive man. Along the Alaskan peninsula and on the mainland eastward a remarkable phenomenon occurs. At sixty degrees of north latitude the sea does not freeze and is open for navigation the year round. Fierce winds sometimes sweep down from the north through the mountain passes and there is constant warfare between the mighty forces of the arctic and the warmth of the south borne on the broad bosom of the Japan Current as it makes its majestic sweep around the great crescent of the Aleutians and south along the northwestern coast of the American continent.

To the primitive voyager,—hunter or immigrant,—there is the lure and enticement of a warm and agreeable winter, gorgeous summers even in the far north, luring him eastward with increasing fascination along the coast,—protected from the winds of the arctic by the huge Coast Range, and from those of the Pacific by the sheltered wooded islands, tranquil bays and inner passages of a great archipelago which extends towards the east and south for one thousand five hundred miles. A thousand placid inlets, winding canals where the salmon leap in the





evening and the deer browse on the shore, afford shelter and an easy passageway for his canoes.

Food is plentiful. Great forests cover the islands and the mainland. Luscious currants and other berries of profuse varieties abound in the glades; vast fields of huckleberries cover the open mountain-sides further in the interior. Great flocks of ptarmigan on the open slopes, ruffed and spruce grouse in the timbered valleys, add variety to the food obtained from the sea. The rivers swarm with many species of trout and salmon. Deer, moose, and bear are plentiful; and, before they were driven further east, great herds of wild reindeer fed on the plentiful moss.

Filtering along this alluring and easy route, in the early days of man's migrations, flowed and fluctuated the stream of Asiatic peoples into the American continents, spreading in the centuries, from the fierce pressure of war, or mere adventure, to the Atlantic and the furthest reaches of Cape Horn.

Where there were means for the passage between the two continents of large land-animals,—and diffusion of the same species over great areas of both continents,—there were likewise means for the passage of man, the fiercest, most enterprising, hardiest and most adaptable of them all. Primitive man was a greater wanderer over vaster regions of the earth's surface, both of land and of water, than he is ordinarily given credit for by his more learned but sedentary and luxurious offspring in studies of their own racial past. Even in the times of our fathers, a journey by ox-team or on foot across a vast continent into unknown and savage regions was scarcely considered as a greater un-

dertaking by the bold and adventurous of those earlier times than a mere change of residence today, from one neighboring city to another, is looked upon by modern sedentary society.

In solving the problem of the unrecorded past the experience of historic times is scarcely given its proper perspective. The passage of the *Niña*, of forty tons, the smallest of Columbus' ships, across an unknown sea into an unknown world was scarcely less adventurous than the great voyages of the Polynesians in their decked and cabined catamarans across the vast stretches which divide the archipelagoes of the South Pacific. The movements of early man, carrying the rudiments of his culture,—his fire-stick and stone-pointed arrows,—from a common center to the farthest boundaries of the continents and to the islands in the far seas, were of the same impulse which enabled Magellan to launch out, beyond knowledge and beyond help, for ninety-eight days in the same direction, over the imponderable distances of the Pacific until he had sailed around the globe.

While the principal source of the aboriginal man who peopled America was undoubtedly through the point of contact which has been maintained to this day under the same primitive conditions of life, by way of Bering Strait and the Aleutian Islands, from a Mongolian and a pre-Mongolian stock on the Asiatic mainland, there is no reason to doubt that there were many accretions to the principal stream from various sources. The lure of adventure, the pressure of hunger, the terror of powerful enemies or the pursuit of weaker ones, the attraction of more favored climates, of richer and larger lands, or a better

supply of game and fish, have impelled the constant migrations or folk-wanderings of restless man along various routes from his earliest appearance upon earth, countless ages ago, until our own time.

Even across the stormy waters of the North Atlantic, the Vikings in their trivial open ships, "shallow, narrow in the beam, pointed at both ends," carrying thirty or forty men each, propelled by eight or ten oars on a side, with one square sail, boldly launched out into the unknown. Passing by way of Iceland and Greenland, they crossed the Atlantic and founded settlements on the American continent. Partly exterminated and partly absorbed, they contributed their imprint, slight though it may have been, to the indigenous American race, while a new race of the mixture of these bloods has been created on the west coast of Greenland.

While such a remarkable voyage as that of Pytheas, from Marseilles to the British Islands and the Northern Seas, more than three centuries before the Christian era, has been rescued from oblivion by slight scraps of history, it is not at all improbable that equally remarkable adventures of Phœnician or other civilized navigators may have carried some traces of the blood, religion, art or industry of Asia, Africa or Europe to Central or South America, though lost in the general current of the new world both to the history and to the traditions of the old.³

³ "America was peopled by Europeans, Africans, and Asiatics long before it was discovered by Columbus. . . . These people belonged to the same ancient races from whom we, the present inhabitants and citizens of the United States, derive our descent. . . . The modern descendants of the ancient Americans are of the same blood and origin as ourselves." Professor Edward Fontaine, *How the World Was Peopled*. He might have added that their stock has now been much diluted by a mixture with darker indigenous peoples. Fontaine asserts the unity of the human race.

The great double canoes of the South Seas, with sails and outriggers, carried more men and supplies than the Viking ships, and the southern islanders were as bold and adventurous navigators as the Norsemen. They sailed upon more placid seas and reached more hospitable shores. On the North Pacific coast of America, the natives had vessels dug out, with admirable skill, from the trunks of trees, capable of carrying a hundred warriors and paddlers.⁴ Even in modern times Japanese fishermen in their smacks venture a thousand miles to sea; and it is reported that in one instance, at least, they have drifted in such a boat across the Pacific to the shores of California.

The southeast corner of the Asiatic continent extends in a long and narrow peninsula to within $1^{\circ} 20'$ of the equator. On an island at this tip is situated the great commercial city of Singapore. Siam and Indo-China form the base of the peninsula, with Cochin-China forming an eastern branch, enclosing between them the Gulf of Siam. From the mainland, on the Malay Peninsula, it is only thirty-five miles across the Strait of Malacca to the great island of Sumatra. From the southeastern tip of Sumatra it is fifteen miles across Sunda Strait to Java, which extends far to the east. Lying to the east of the peninsula, across the South China Sea, is the great chain of the Philippines, the Sulu Archipelago extending southward to Borneo, the latter lying some two hundred miles northeast of Sumatra with many small islands intervening. From Java and Borneo, a vast archipelago of innumerable islands,—some, like Australia, continental in their dimen-

⁴ In the American Museum of Natural History (New York) there is a specimen from Queen Charlotte Island sixty-three feet long, eight feet three inches wide, and five feet deep.

sions, others, the mere tips of volcanic peaks or coral reefs,—stretches far into the southwestern Pacific.

Lying generally between the equator and the tropic of Capricorn, the ocean roadway runs to the eastward by Celebes, the Moluccas, the great island of New Guinea, the Solomons, the Gilbert group, the New Hebrides, the Friendly archipelago, Fiji, Samoa, the Society group, to the Gambier Islands of the Low (Paumotu) Archipelago, and still further east. Polynesia, composing the central portion of the island highway, extends its hospitable lodges in the pleasant waters, like stepping-stones across the vast reaches of the sea, to 130° West longitude. This broad band of scattered gardens of the sea extends directly towards the west coast of South America on the latitude of Peru and northern Chile. When Quirós sailed due west from Callao and told his pilot, "Let God take her," he discovered many of these alluring, peopled islands in the direct route to Asia.

To the daring aboriginal navigators who, in the course of the centuries, explored and settled this pleasant domain of the sea and carried to it the pagan culture of Asia, it was an empire of plenty. The sea was mild, constant breezes from the changing waters mitigated the heat of the tropics. The cocoanut, boxed in its buoyant shell, carried by the currents from island to island, and transplanted by the waves on the caving beaches, shaded and adorned the long lines of the curving shores with its graceful branches.⁵ The nutritious taro flourished in the moist and fertile soil.

⁵ De Candolle ("great authority on cultivated plants") says that the native habitat of the cocoanut is Central America,—whence it has spread to Polynesia. Discussion of this by S. Percy Smith, "Niue Island and Its People," *Polyn. Soc. Jour.*, XI (1902), 96-97.

Great trees in the mountain valleys furnished material for the huge canoes and built-up boats of this race of seamen. Fish abounded in the open sea and in the island waters. These with the plantain, the breadfruit, the yam, the manioc, the birds in the hills, afforded an abundance of food. Life was easy there for the great Polynesian race.

But there was the constant pressure of population and chronic war, and in these Elysian fields, as with all primitive races, the lure of discovery and settlement was strong. From Tahiti the Polynesians passed over 2,259 nautical miles of sea and settled Hawaii. From the Gambier Islands they navigated 1,405 nautical miles to Easter Island where they found great stone platforms of open temples and gigantic monolithic idols, crudely picturing the human features,—stone images of the Proto-Polynesian gods in the grotesque forms of Asiatic art.

From Hawaii to the Mexican islands is 2,079 sea miles,—nearly 200 miles less than the distance traversed in settling Hawaii itself. From Easter Island to the group of St. Felix and St. Ambrose, or the Islands of Juan Fernandez,—the latter only 350 nautical miles off the Chilean coast, and the former but little further from the coast of Peru,—is a distance of 1,564 sea miles to the one and 1,624 to the other. In view of the fact that these were much less than the distances traversed in the settlement of various groups in the mid-Pacific, it would have been strange had not this powerful race of navigators proceeded in their quest to the mainland of the great continent lying within reach to the east.

A strange neglect has retarded the study of comparative

philology and culture of these races; but sufficient is known to support the conclusion, which is most probable in itself, that the voyagers who through great ages had passed from Asia by this chain of islands,—populating them from island to island, carrying war and commerce,—continued also to the mainland of America and mingled there with its people, who had come from other directions,—introducing such of the language, art, and religion of southern Asia as had survived the generations of the island environment and the long migrations across the seas.⁶

Of the Polynesians A. H. Keane suggests “that they are a branch of the Caucasian division of mankind who possibly migrated in the Neolithic period from the Asiatic mainland.”⁷

“They used to construct decked vessels capable of carrying one or two hundred persons, with water and stores sufficient for a voyage of some weeks’ duration. . . . The people had a knowledge of the stars, of the rising and setting of the constellations at different seasons of the year; by this means they determined the favourable season for making a voyage and directed their course.

⁶ The *tiputa* worn in the Caroline Islands and Tahiti was practically identical with the Peruvian poncho. The Maori *mere* (war club) was identical in form with a specimen found in Ecuador. The method of making *kava* in Polynesia (fermented from saliva) was the same as that used in making the Peruvian *chicha*. The *quipu* system of keeping records, “widespread in Polynesia and Micronesia,” was an important Peruvian institution; likewise the system of records kept on notched sticks was used systematically in New Zealand, Tahiti, and Peru.

The *umu* or earth oven (system of cooking food wrapped in leaves and covered up on hot stones in a hole in the ground) was common to Polynesia, the northwest coast of America, and Chile. “It was probably bred in the frozen soil of the wintry north.” The stone adze was used with the same form and the same name (*toki*) in the island of Chiloé, Chile, and in Polynesia.—J. Macmillan Brown, *The Riddle of the Pacific*, pp. 263-65.

⁷ *Encyc. Brit.*, 11th ed., XXII, 33.

"The Polynesians were by no means a savage people when they entered the Pacific. . . . Those who are familiar with their legends, and have studied native manners and customs, see many unmistakable proofs that the Polynesians had, at their migration, considerable knowledge and culture, and that the race has greatly deteriorated.

"The Polynesians are physically a very fine race. On some islands they average five feet ten inches in height. De Quatrefages . . . puts the natives of Samoa and Tonga as the tallest people in the world. . . . They are well developed in proportion to their height. Their colour is a brown, lighter or darker generally according to the amount of their exposure to the sun . . . Their hair is dark brown or black; smooth and curly, very different from the frizzly mop of the Papuan or the lank straight locks of the Malay. They have very little beard. Their features are generally fairly regular and often beautiful."⁸

It is significant that the whitest and most magnificent specimens of the race are the Paumotuans in the Low Archipelago, the easternmost and least fertile of the great island groups.

In Siam and Cambodia, the last vantage point on the mainland of Asia of these ancient vikings of the South Seas, who reached as far as the shores of America, a high degree of skill in the art of masonry was early attained, leaving prehistoric monuments with which those of Mexico, Central America, and Peru are comparable. The unmistakable relationship of language, religion, architec-

⁸ "Polynesia," *Encyc. Brit.*, 11th ed., XXII, 34.

ture and art of prehistoric Aztec, Mayan, and Inca peoples with various early cultures of Asia, Europe, and Africa can be reasonably explained by the hypothesis of the evolution of all from a common seed stock in Asia, spreading by various migrations in different epochs to the four quarters of the earth.

There is no reason to suppose that the impulses which evolved these movements were limited to one era or to one direction. In fact, even within what may be called historic times, there are proofs of many such migrations; and recent archeological researches have disclosed many more such folk-wanderings, reaching much further back into the primitive period of man's existence than had been supposed.⁹

It is far more likely that the device of the bow and of the beautifully chipped arrowheads of identical shape and method of manufacture used by the Celts of Europe, by the Cherokees and other Indians of America and the Mongol tribes of Asia, were all inherited from a common focus of early culture, spreading by easy and well-known routes in various directions, than that these remarkable triumphs of early genius had a hundred independent origins all leading to exactly the same but totally disconnected results!

Asiatic man advanced in culture more rapidly than his offshoots in Europe and America because of his early and continuous domestication and subjection to his use of the

⁹ From a study of crania in the entire areas of Polynesia, Indonesia, Micronesia, Malaysia, and southeast Asia, Dr. Roland B. Dixon (Harv.) suggests (*A New Theory of Polynesian Origins*, as reviewed by *Polyn. Soc. Jour.*, XXX, 79), "The racial history of the Oceanic area could be logically and satisfactorily explained by a series of waves of fundamental or derived types spreading from west to east throughout the whole area."

horse, the camel, the sheep, the goat, the yak, the ox, the elephant, the reindeer, the chicken and various other beasts and birds,—thus multiplying his physical powers, developing his ingenuity and sense of control and authority, increasing and insuring his food supply, and releasing his time for study and varied culture.

What cataclysm of climate or slow influence of environment had exterminated in America the small ancestors of the camel and horse, whose fossil remains are plentiful in the West, is obscure; but when man reached the American continent the only descendants of either which remained were the guanaco and vicuña, from which have been bred the llama and the alpaca in the Andes. The llama, at a remote age, he bred and subjected to his service; and what part this circumstance played in the development on the Andean plateau of southern Peru,—the natural habitat of the guanaco and the vicuña,—of the most advanced and persistent culture on the continent, is an interesting subject of inquiry and reflection.

It is not necessary to assume from the absence of the horse in America before Columbus that the Asiatic nomads reached these shores before the domestication of that helpful animal, which gave such a tremendous impetus to the progress of civilization. While it was possible for the sheep and the reindeer to live on the mosses and lichens of the arctic, and so to cross the narrow expanse of ice which separated the two continents,—or for the hardy tribes of the Chukchis, settled along the Asiatic shores of Bering Strait, who fed upon both these animals, to follow them,—there was no food there for the horse.

A careful observation of the American Indian makes

obvious his Asiatic origin. There, no doubt, were slight infusions of other blood, but the resemblance of the Indians of the northwest coast of America to the various tribes and nations of eastern Asia is so great that when they are placed under similar conditions as to dress, occupation, and exposure to the sun, it is difficult to distinguish one from the other. With due allowance for the vast range of conditions such as climate, mode of life, and means of subsistence which have been constantly operating throughout untold ages to produce divergencies and specialization of type, the same general similarity exists throughout the continent. The weird village totem poles, clustered here and there along the great curve of the Pacific from Korea to Sitka, telling the story of the clan, are interesting proofs of the continuity of belief and identity of grotesque art.

Though many languages are spoken by the Indians in the vast expanse of the American continents, the best philological opinion is that they are all related. The tendency of most writers on the subject is to search for differences rather than to note and marvel at similarities.

The Romans had the word *canna*, meaning a small boat. Columbus found the Caribs using the same word in the form *canaoa*, with the same meaning. When Cortes arrived in the valley of Mexico, he found that the Mexicans,—though the chief motive of his great adventure was to destroy their religion and to substitute his own,—had the same word for God that he himself had. His own was *Dios*, from the Greek *Theos*; the Mexican, as Cortes converted it to writing, was *Teotl*.

This does not indicate that the Romans had any com-

munication with the Caribs or the Greeks with the Aztecs; but it illustrates the process by which not only words but the things the words represented, essentials of primitive man, and primitive man himself, found their way by expansion, contact, fusion, direct migration, war, trade and the chase, from a common pre-Aryan origin in the highlands of Asia to Europe on the one hand and America on the other.

III

THE EVOLUTION OF ARTS

Who ever heard of th' Indian Peru?
Or who in venturous vessel measured
The Amazon's huge river, now found true?
Or fruitfullest Virginia who did ever view?

Yet all these were when no man did them know,
Yet have from wisest ages hidden been;
And later times things more unknowne shall show.
Why then should witless man so much misween
That nothing is, but that which he hath seen?

EDMUND SPENSER, *The Faërie Queene*.

It is claimed that the art of making and decorating pottery of excellent quality and varied design, and of weaving cotton and woolen cloths of the finest texture, possessed by Mexicans, Mayans, and Peruvians,—carried to a high degree of perfection, especially by the last,—was independently developed in America and owed nothing to Asia.

Certainly it is true that in America these arts acquired special characteristics; but to assume that they originated wholly in America without suggestion or inspiration from similar triumphs of human ingenuity in Asia would be contrary to all probabilities of reason even though we had no positive proof of actual contact.

Our own industries of ceramics and weaving, even with

all their changes in this age of machinery, are derived by thoroughly well known lines of descent from the industry and invention of the ancient world. In every country where the history of these arts is thoroughly well known, their origin can be traced back to Asia or Egypt.

If, where the facts are known, the origin of the art of weaving of every people, including our own, can be traced back to a common source, it would seem to be quite illogical, when the circumstances are not known, to presume that this triumph of man's skill and intelligence had an entirely disconnected origin.

Probably the most consequential event in man's struggle up from mere animalism was the mastery of fire and the discovery of its uses. By using fire to warm his habitation, he extended his range into all zones and seasons. By its use in the preparation of his food he opened up new sources of supply and added vast variety to his diet. By its use in arts and industries he improved his weapons and shaped new tools. By subjecting to his use this elemental force of nature he, in one step, multiplied his powers and resources and put himself in a superior station as to the rest of creation.

It is possible that this epochal achievement may have been attained by different tribes independently of each other; but it dates back to the very early stages of man's development, and it is much more likely that the knowledge of the use of fire and the means of making it were disseminated from a single origin in the first dispersion of the race. There was but one such Promethean gift, though the conceit of man is such that, as in the case of

religion, each most insignificant tribe believed that a special dispensation had been made in its case.¹

E. B. Tylor closes his article on "Anthropology" (*Encyclopedia Britannica*) by advocating the polygenist theory of evolution of cultures; arguing that identical religious customs, arts, weapons, and industries have been developed in different parts of the world by different peoples entirely independently.²

He cites the case of the Tasmanians with paleolithic culture though entirely separated from the rest of mankind. This last, instead of supporting the doctrine of a mutual independence of cultures, is,—properly interpreted,—a corroboration of the doctrine of a common origin of identical cultures and of their orderly and rational diffusion. The Tasmanians were no doubt separated from the original stock in remote paleolithic or pre-

¹ . . . "We have shown that Thlinkeets, Ahts, Andaman Islanders, Australians, Maoris, South Sea Islanders, Cahrocs, and others all believe fire was originally stolen. Is it credible that, in all their languages, the name of the fire-stick should have caused a confusion of thought which ultimately led to the belief that fire was obtained originally by larceny? . . . No race is found without fire."—Andrew Lang, "Prometheus," *Encyc. Brit.*, 11th ed. However, the author proceeds to suggest by an ingenious but most unlikely hypothesis that this same idea or myth originated independently in each tribe.

² "Anthropological researches undertaken all over the globe," he says, "have shown the necessity of abandoning the old theory that a similarity of customs and superstitions, of arts and crafts, justifies the assumption of a remote relationship, if not an identity of origin, between races."

This seems to imply that this author is of the opinion that there is not even a remote relationship between the races. Under such a doctrine it is necessary to assume that each race of man had its origin disconnected from all others, even in the remote stages of man's development. Such a view is certainly far from being scientific or in accordance with the monistic theory of the evolution of man on this planet. Ernst Haeckel, *The Riddle of the Universe*; Herbert Spencer, *Principles of Sociology*.

It may be added, however, that while Haeckel and Darwin might resolve creation to a first principle, this first principle is still the "Riddle of the Universe" and remains unsolved except as the unseen and inscrutable God,

paleolithic times and cast upon their out-of-the-way island. They brought with them their rough flint knives and saws of the remote savage past. On the hypothesis of the polygenist of the independent evolution of cultures, we should expect to find that these savages would progress to the neolithic stage, adopt agriculture, devise improved weapons of the chase and fisheries.

But they have not done so. On the other hand their culture has remained of the crudest sort and their mode of life only one degree removed from that of the beasts. That this is so is evidently due to their isolation,—to lack of contact with the early progress of primitive man, when he slowly lifted himself above the crude savage state, invented various arts, acquired knowledge and ideas by trade and contact with other men, perfected weapons,

Viracocha, Jehovah,—the Creator. They can explain the manner in which the principle works but cannot explain nor even form a conception of the great First Cause itself by which God “moves in a mysterious way His wonders to perform.”

The pagan mythologists like the modern scientists fancied a being or principle from which all things sprang; but they always came to a point where they could not explain the origin of this “original” being. Indra of the Indo-Aryans sprang from the breast of Prajapati. In the Mangaian myth (Andrew Lang, “Mythology,” *Encyc. Brit.*, 11th ed.), “the woman of the abyss made a child from a piece of flesh plucked out of her own side,” as Eve was formed from Adam’s rib and Athena from the head of Jove. In the Scandinavian version of the Aryan Purusha-Sukta myth, the giant Ymir came from the abyss, “a chaos of ice,” as it thawed, and a man and woman “sprang from his armpit.”

“The tortoise from which all things sprang, in a myth of the Satapatha-Brahmana, reminds one of the Iroquois turtle.”

But always the reduction of the problem of creation reaches a point beyond which the human mind of Brahmin or modern scientist cannot go,—whether it is the Lotus from which the sun-god Ré came as a naked babe or the protoplasm or ether or the sunlight which was “transformed” into the panorama of the world (Haeckel), or the Hindu tortoise on which stood the elephant which carried the universe on its back.

The Pundits resolved all the learning into the simple and sublime Aryan conception,—“in the beginning God created the Heaven and the earth.”

domesticated animals, and disseminated one accomplishment after another into various parts of the world.

Those who were in the currents of migration and of travel, of folk-movements and war, acquired the new ideas, modified them here and there to a new environment, and so added their quota to the general progress. At first advance was slow, almost imperceptible through countless ages. Progress was accelerated, however, by each advantage gained. Intelligence itself developed with each triumph of human reasoning, until in the later years of prehistoric and early historic time progress came with rapid pace, quickening in the nineteenth century to lightning speed as the human mind, feeding upon its own triumphs, became acquainted with itself and utilized the more subtle elements of nature in its service.

As well say that the telegraph, the internal combustion engine, the radio, the harnessing of steam and electricity, were the independent products of each continent for itself rather than having come from the same original germs which spread from the brains of the inventors to all parts of the world—as say that the bow and arrow, the invention of speech, the mastery of fire, the art of weaving, the identity of religious beliefs or of magic, were not diffused from tribe to tribe in their migrations, but were merely due to “an inherent tendency in man, allowing for difference in climate and material surroundings, to develop culture by the same stages and in the same way.”³

³ “All the Yankee ingenuity in the world could not have produced the automobile until science had produced a knowledge of the principles that are embodied in its construction. Here are a few—by no means all—of the labors of ‘pure science’ that made the automobile possible: Clark Maxwell’s mathematical demonstrations of electrical theory, Michael Faraday’s

Mr. Tylor goes to the length of saying that "American man . . . need not necessarily owe the minutest portion of his mental, religious, social, or industrial development to remote contact with Asia or Europe though he were proved to possess identical usages. An example in point is that of pyramid-building. No ethnical relationship can ever have existed between the Aztecs and the Egyptians; yet each race developed the idea of the pyramid tomb through that psychological similarity which is as much a characteristic of the species man as is his physique."

And how does he account for the similarity of his "physique"? Is that also due to a mere "inherent tendency"? And, if so, how would they get the same "inherent tendency" except from a common origin?

Aside from the general conclusions to be drawn from the constant contact and intercourse which have existed from the most remote times and exist at present between the primitive "American man" and the Asiatic, and the obvious fact that they are of the same race, which in itself explains the common origin and identity of much of their culture,—Professor G. Elliot Smith has quite clearly pointed out a possible and indeed very probable ethnical relationship, at least a relationship of culture—by way of Assyria, India, Malaysia, Polynesia—between the Aztecs and the Egyptians.

researches into the effect of the rotation of a magnet within a field of electrical force, Rowland's determination of the mechanical equivalent of heat, Galileo's invention of the telescope, the invention of the prism, the development of the science of spectrology, by which analysis was made of the elements of the sun, which in turn led to the discovery of new elements in the earth that made possible in turn the strengthening alloys of steel that made possible the light frame and engine of the automobile."—*World's Work* (editorial), December, 1926.

"There is no doubt that India derived a great deal of its earliest culture from Babylonia and Egypt, and gradually assimilated these adopted customs and beliefs until there developed a new cultural compound distinct from Babylonian and Egyptian civilizations and characteristic enough to receive the name 'Indian.' But during the centuries it took to effect this process, India was handing on to Indo-China the torch of Western knowledge before it had assumed its distinctively Indian form. Hence the Far Eastern civilization preserves more definite traces of its original Egyptian and Babylonian inspiration than Indian civilization itself, because the vigorous and prolonged development of the latter effected a much more profound transformation. This principle can be applied not only to early streams of culture but also to all the subsequent waves. Moreover it can be used to explain not only Cambodian problems, but also those of Indonesia, Oceania, and especially America, in the primitive civilization of which can be recognized contributions from India, Indonesia, Indo-China, China, Melanesia, and Polynesia, but also not a few ingredients of much earlier but quite unmistakable Mesopotamian, Mediterranean and Egyptian influence.

"The most obtrusive factor in the customs and beliefs of the Maya civilization is unquestionably Indian."⁴

As in discussing other phases of culture, the difficulty seems to be in the assumption that as there was no direct contact there could not possibly have been a common origin. As a matter of fact, as cultures spread among primitive men in their wide wanderings,—quest for food,

⁴ *Elephants and Ethnologists*, p. 122.

trade, war, and mere adventure,—the same culture became so widely spread as to be adopted, or at least to leave its trace, in varied remote parts of the world which had no knowledge of each other,—no apparent contact, no traceable kinship.

It is entirely possible that the custom of erecting pyramids may have spread from Egypt to Asia and from Asia to Mexico and Peru, as it is assured that the remote islands of Oceania were peopled by the enterprise or accident of primitive Asiatic man; but it is much more likely that the rude germ of the idea of the pyramid altar and tomb spread from a common center of the Aryan race on the highlands of central Asia to Africa on the one hand and America on the other. (Note recent excavations at Ur.) That other things much more acutely characteristic than pyramids, such as certain identical words, did do so is assured. The megalithic cromlechs and dolmens were erected by men of the same culture on the Pacific shore of Asia, on the Mediterranean coast of Africa, in France and Britain, and on the Andean pampa of Peru.⁵

⁵ Professor Tylor's views cited above seem to be in entire conflict, even as to the development of arts and industries, to say nothing of the race itself, with earlier parts of his own article where he very logically argues: "The fact that man has existed during a vast period of time makes it more easy to assume the continuance of very slow natural variation as having differentiated even the white man and the Negro among the descendants of a common progenitor. . . . Darwin's summing-up of the evidence as to unity of type throughout the races of mankind is as distinctly a monogenist argument as those of Blumenbach, Prichard, or Quatrefages. . . .

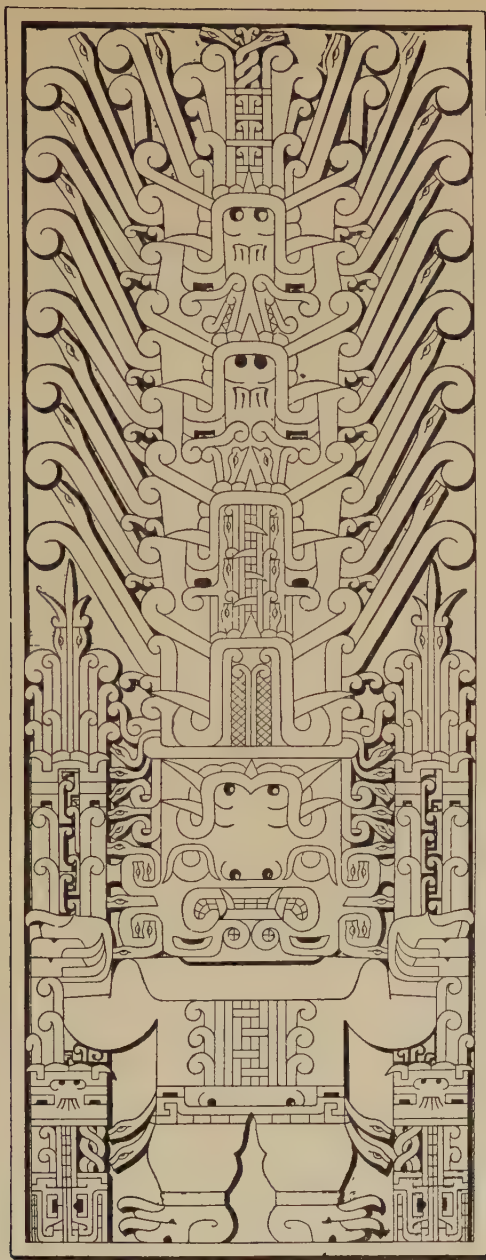
"The teaching of history, during the three to four thousand years of which contemporary chronicles have been preserved, is that civilization is gradually developed in the course of ages by enlargement and increased precision of knowledge, invention and improvement of arts, and the progression of social and political habits and institutions towards general well-being. That processes of development similar to these were in prehistoric times effective to raise culture from the savage to the barbaric level, two considerations

Quatrefages sums up his views as follows: "I have examined in detail all these questions in a work already published some years ago (*Unité de l'espèce humaine*, 1861). I have endeavored to show how the application of physiological laws to anthropology leads inevitably to the recognition of *the unity of the human species*, and zoological geography no less imperiously obliges us to believe in a primitive *common center of that (human) species*.

especially tend to prove. First, there are numerous points in the culture even of rude races which are not explicable otherwise than on the theory of development. . . . Again, many devices of civilization bear unmistakable marks of derivation from a lower source . . . Second, the process of 'survival in culture' has caused the preservation in each stage of society of phenomena belonging to an earlier period, but kept up by force of custom into the later, thus supplying evidence of modern condition being derived from the ancient." "Anthropology," *Encyc. Brit.*, 11th ed., II, 114-117.

A view just as rational as this last, and much more consistent as a whole, is that of the unnamed author of "Ethnology and Ethnography" (*Encyclopædia Britannica*): "All physiologists agree that species cannot breed with species. Darwin himself laid it down as a fundamental principle. If then the palaeolithic and neolithic types [of man] represented separate species, they would be found to remain distinct through all time. This is not the case. . . . The palaeolithic type is to be found among modern European populations. . . . After thousands of years nearly pure descendants of quaternary man are found among living races. And man's mutual fertility in pre-historic is repeated throughout historic times: strict racial purity is almost unknown. Thus the unity of the species man is proved by the test of fertility.

"The works of early man everywhere present the most startling resemblance. The palaeolithic implements all over the globe are all of one pattern. 'The implements in distant lands,' writes Sir J. Evans, 'are so identical in form and character with the British specimens that they might have been manufactured by the same hands. . . .' This identity in the earliest arts is repeated in the later stages of man's culture; his arts and crafts, his manners and customs, exhibit a similarity so close as to compel the presumption that all the races are but divisions of one family. . . . As Dr. J. C. Prichard urged, 'the same inward and mental nature is to be recognized in all races of men. . . . We are entitled to draw confidently the conclusion that all human races are of one species and of one family.' It has been argued that stock languages imply stock races, but this assumption is untenable. There are some fifty irreducible stock languages in the



THE "CHAVIN STONE"

From "*La Piedra de Chavin*," by José Toribio Polo,
Lima, 1900. See description Vol. I, pp. 138-9.

"From these two fundamental facts demonstrated outside of every preconceived idea and every religious dogma, as well as every philosophical system, it follows that man, setting out from his center of origin situated very probably in the high regions of Asia, only occupied the rest of the world little by little and from one neighborhood to another. In other words the peopling of the globe occurred *by means of migrations*.

"The investigation of these migrations, the tabulation

United States and Canada, yet, taking into consideration the physical and moral homogeneity of the American Indian races, he would be a reckless theorist who held that there were therefore fifty separate human species. . . . In Caucasia, there are many distinct forms of speech, yet all the peoples belong to the Caucasian division of mankind.

"Man, then, may be regarded as specifically one, and thus he must have had an original cradle-land, whence the peopling of the earth was brought about by migration. . . . As to man's cradle-land, there have been many theories, but the weight of evidence is in favour of Indo-Malaysia.

"Of all animals man's range alone coincides with that of the habitable globe, and the real difficulty of the 'cradle-land' theory lay in explaining how the human race spread to every land. This problem has been met by geology, which proves that the earth's surface has undergone great changes since man's appearance, and that continents, long since submerged, once existed, making a complete land communication from Indo-Malaysia. The evidence for the Indo-African continent has been summed up by R. D. Oldham ("Evolution of Indian Geography," *Geographical Journal*, March, 1894), and proofs no less cogent are available of the former existence of an Eurafrian continent, while the extension of Australia in the direction of New Guinea is more than probable. Thus the ancestor of man was free to move in all directions over the eastern hemisphere. The western hemisphere was more than probably connected with Europe and Asia, in Tertiary times, by a continent, the existence of which is evidenced by a submarine bank stretching from Scotland through the Faeroes and Iceland to Greenland, and on the other side by continuous land at what is now the Berhing Straits.

"Acclimatization has been urged as an argument against the cradle-land theory, but the peopling of the globe took place in inter-Glacial if not pre-Glacial ages, when the climate was much milder everywhere, and thus pleistocene man met no climatic difficulties in his migrations." "Ethnology and Ethnography," *Encyc. Brit.*, 11th ed.

Much light has been thrown on the diffusion of ancient culture from central Asia by the excavations recently made at Ur under the auspices of

of the traces which they have left, the proof of their results, are a part of the task which devolves upon the anthropologist, and one can understand easily the difficulties and obstacles which such a study must encounter. The polygenists have not failed to seize upon these difficulties, which are indeed too substantial, and to exaggerate them even more and to oppose them under the head of objections to the monogenist doctrine. The majority, taking the problem in its most general aspect, have declared these migrations *impossible*.⁶

the University of Pennsylvania and the British Museum. A Sumerian culture dating back to 3800 B.C., including writing and pyramidal temples much resembling those of Mexico, Central America, and Peru, has been disclosed. A high state of art at that early date necessarily implies many thousands of years of cultural progress prior to 3800 B.C.

⁶ A distinguished author, Professor Roland B. Dixon, in his valuable work, *Racial History of Man* (1923), quite elaborately declares in favor of the polygenist theory. However, he immediately proceeds to modify, if not completely revoke, this declaration by the statement (pp. 504-5): "We must, to be sure, postulate an ultimate prototype from which all the suggested 'archetypes' were derived. . . . The degree of divergence in the human phylum was less great than in that of the apes. The separate varieties were fertile *inter se* and have blended and crossed in every imaginable fashion to produce the existing races of man."

Most of the differences of the so-called "archetypes" on which Professor Dixon's book is based are superficial and secondary. What he designates as "archetypes" are purely artificial classifications listed in an arbitrary laboratory nomenclature. On the one hand the standards of classification adopted by the author join in one identical "archetype" such repugnant extremes as the white Aryan of the highest type and the African negro (both "dolichocephalic"). On the other hand, by the same arbitrary standards, white blond Aryans now occupying together the same European areas are divided into separate "archetypes." Indeed, according to these standards, members of the same family and parentage are often of different "archetypes."

Fundamentally all types are similar. The essential elements which constitute them *man* are the same in all.

Some of the so-called "archetypes" are merely cases of arrested development. Many such exist at the present day, not only as types or so-called races, but as individuals within the type, race, family, or tribe. These are all *men* of the same human ancestor but exemplifying many of the physical as well as mental traits of the ancient divergent species.

"It is especially in regard to America and Oceania that this decree has been pronounced, and that by men of undoubted learning. Well then, the more substantial these authors are, the more it is necessary to answer them and to refute by facts what, in my view, is only a baseless assertion."⁷

⁷ *Les Polynésiens*. Introduction, pages 2 and 3.

"The very bronze and iron that name the later ages, the grain and animals that are the basis of their economic life, were intercontinentally disseminated and represent in most of the lands that came to possess them, an import from an alien focus of growth, and currents usually run both ways. China received metals, wheat, cattle and horses, cotton, architecture and religion, possibly the suggestion of script, from the West; but she gave to it silk, porcelain, gunpowder, and people. . . . The Near East probably gave to Europe most of the elements of civilization which the latter possessed during the Neolithic, Bronze, and Iron periods; but much which the Near East had it failed to transmit."

A. L. Kroeber, *Anthropology* (New York, 1923), p. 426.



HUASCAR INCA

From "Monarquía Peruana" by Dr. Justo Sahuaraura, Inca.

This Inca, the son and heir of Huayna Ccapac, was drowned under the orders of his brother Atahualpa while the latter was held prisoner by Pizarro.

"And with all delivereth to either of them a jewel, made in the figure of an ear of wheat, which they ever after wear in the front of their turban or hat."—Francis Bacon, *New Atlantis*.

Compare the golden wheat (or barley?) ear which crowns the Inca's scepter. Wheat and barley were unknown in Peru. Whence came the conception?

IV

MIXED CULTURES

"Amongst the excellent acts of that king, one above all hath the pre-eminence. It was the erection and institution of an Order or Society which we call Salomon's House: the noblest foundation, as we think, that ever was upon the earth, and the lanthorn of this kingdom. It is dedicated to the study of the works and creatures of God." Francis Bacon, *The New Atlantis*.

"Solomon's House in the *New Atlantis* was a prophetic scheme of the [British] Royal Society." Joseph Glanvill, *Scepsis Scientifica*. "One of Bacon's greatest achievements was the impetus given by his *New Atlantis* to the foundation of the Royal Society." Robert Adamson and John Malcolm Mitchell, "Francis Bacon," *Encyclopædia Britannica*.

"Now a meeting pertaining to the *School of Learning* was held. The place whereat the house was situated was Puhiraki [in Irihia, the traditional cradle-land of the Polynesians] and the meeting was held there. . . . The object of this meeting being the ending of the war." Maori tradition, given by Elsdon Best in "Irihia," *Polynesian Society Journal*, 1927, p. 348.

THE conflict so bitterly waged between the advocates of the theory of a purely local or autochthonous origin of the Mexican and Peruvian cultures, and those who contend that the civilization of the early Americans was imported from Asia, would seem to be wholly factitious and unnecessary.¹ There is no absolute incompatibility in the two

¹ This discussion is as inconclusive as that observed by a traveler in a small village which he visited. Noticing that there were two small churches of miserable appearance, he asked a villager why the people of the village did not unite and build one good church which would easily

views. It is probable that both are partly and neither is wholly correct.

Both Mexico and Peru undoubtedly had each its own original culture, each with peculiar and characteristic features, molded by local physical conditions, specialized by geographical surroundings, each exploring new fields, and each illuminated by the inventive genius of its people. The accidents of their several histories and the whims, caprices, and dispositions of their priests and rulers must inevitably have tended towards a wide divergence in the religion, government, arts, industries, and general character of the several peoples. And this must have been especially so on such a stage as America,—a continent so remote and a topography so vast, a soil, climate, flora and fauna so different from that of the rest of the world.

In the long ages since America had been peopled from the West the developing genius of man must necessarily have created an American culture distinct from that of Asia. However, both *a priori* reasoning and the study of actual conditions demonstrate that this culture had various contacts,—over widely diverging lines of communication and in many different epochs,—with the art and religion of the old world; and that much even that had taken on new form on the Mexican plateau or among the cordilleras of the Andes had the germs of its inspiration away back in the highlands of Asia.

In the first place it would theoretically be quite unreasonable to suppose that an American people of the

accommodate them all. "Well," said the villager, "some of us wanted to do that, but there were two factions which fought bitterly. One party claimed that Adam fell from grace. The other insisted that he was a son-of-a-gun from the beginning."

same race as that of Asia,—evidently derived from Asia,—should not have brought with it in its dispersion from the original home of the race at least some of the elementary features of its early culture; and as intercommunication between the two continents has continued, perhaps without interruption, by Bering Strait from prehistoric times to the present day, it is against all probability to suppose that the influence of Asiatic art, both civilized and barbaric, has not flowed through this channel and been disseminated with the diffusion of the race. The presumption of Asiatic influence is strengthened by the inherent probability of repeated infusions from Polynesia.² That what was probable, from the conditions, has actually occurred is demonstrated by *a posteriori* examination of the history and movements of the peoples.³

The culture of the United States today is much further removed from the ancient mental and physical accomplishments and beliefs of man in Asia than was that of the Mayas or the Incas; and yet, though we have our own

² The Egyptian myth of Ré, the sun, being made captive, also appears in Polynesia, Greece, Germany, Peru, and North America (among the Dogrib Indians). In Polynesia the divine hero Maui, after finding his nooses consumed in the sun's heat, made a noose of the hair of his beautiful sister. This was not consumed and he captured the sun. The Dogrib hero likewise succeeds with a noose made of his sister's hair. "It is idle," says Tregear ("Asiatic Gods in the Pacific," *Polyn. Soc. Jour.* II, 1893, p. 140), "to talk of coincidence in cases like this. . . . The myth is one."

³ As there were many accretions of Asiatic culture and blood across the Pacific there were also contacts at some points with white men from Europe and black men from Africa by way of the Atlantic. (*Africa and the Discovery of America*, by Leo Wiener, professor of Slavic Languages, Harvard University.) There were also trade and traditions,—the transmission of these and other influences between Peru and Central America,—and many other inter-American contacts and exchanges.

The bitter controversy over this point, which involves no necessary conflict, is similar to the wholly futile quarrel which the champions of the Bible story of the creation have with the teachings of science. As a matter

original institutions, how much of our civilization is free from the influence of Asiatic, to say nothing of European, originals? What proportion of the essential and fundamental things in it is not indebted to the inventions of primitive man and does not trace its present development by unbroken lines of influence to conceptions and accomplishments of our Asiatic ancestors in early historic and prehistoric times? How much that enters into the very essentials of our lives can the advocates of the polygenist doctrine of the origin of man and his culture point out, even in this age of invention, that is completely indigenous to our soil?

There is nothing strange in the fact that much of the religious mythology of the Mexicans and Peruvians was of undoubted Asiatic origin when it is considered that all of our own religion comes from Asia. As with the architecture, painting, and sculpture of Copán and Quirigua, most of our own, today, has a clearly defined lineage from

of fact there is no real contradiction. The Bible says God created man "of the dust of the ground," and science teaches the same. The Bible tells of the universal presence of God working in all the elements of nature. Science demonstrates this truth. The Bible does not tell how or in what manner or by what means God wrought his creations. Science, by the minute study of infinite details of God's work, has explained in part the manner in which man was created from the dust of the ground. The Bible says, "All flesh is grass," and science corroborates and proves the identity of their elements.

"Evolution," the marvelous process by which God works his material wonders, enhances rather than degrades our conception of divinity. Why there is any lowering of the dignity of man's estate by the conception that he has been raised and ennobled from lower forms of life, rather than formed directly and instantaneously from the dust and filth of the earth, is not entirely clear. The bitter controversy and intolerance over this point where there is no real conflict is only another proof of man's inherent "cussedness,"—or, in other words, "original sin."

How it can be argued that the development of an indigenous "civilization" in America precludes the contact of that civilization with other parts of the world long before the voyage of Columbus, is no more apparent.

the art of Asia. Ours was derived through Greece and Rome and the Italian Renaissance; theirs from contemporary sources by a more direct route across the Pacific.

Both the Inca and the Maya civilization,—even their languages,—had much in common with our own, inherited from the same common, Far Eastern cradle-land of the race. The laws of Moses, evolved from thousands of years of experience of Asiatic peoples before Moses, are the foundation of our codes of laws as they are of those of most, if not all, other civilized peoples. Many of these statutes have the sanction of religion, as well as of governmental authority, now as when given out by the priests and rulers of the East. Our greatest religious festivals are identical with those of Mexico and Peru, founded as were those on the same beginnings in the tablelands of Asia. The belief in the Incarnation of our God and the sacrament of the eating of his flesh ⁴ were brought from India or its culture sources, alike to Quichuas and Anahuacs and to ourselves.⁵

⁴ J. G. Frazer, *The Golden Bough*.

"His [the Aztec god Huitzilopochtli's] sacrament, when paste idols of him were eaten by the communicants, was at the winter solstice." [Our Christmas.] Andrew Lang, "Mythology," *Encyc. Brit.*, 11th ed., XIX 138.

⁵ "All the myths relative to the founders of the different American civilizations make reference to persons who have the same characters. All are white, bearded, generally covered with long vestments; they appear suddenly and mysteriously, give laws, instruct and introduce religions of bloody practices, and disappear in a supernatural way. Such have been Quetzalcoatl, who appeared in Cholula, Votán in Chiapa, Wixepēcōcha in Oajaca, Zamna and Cukulcan in Yucatan, Gucumatx in Guatemala, Uiracocha in Peru, Bochica in Colombia, and Sumé and Paye-Tome in Brazil."—Hubert Howe Bancroft.

It may be said that all these beliefs were indigenous in their several countries; but there is no more reason for denying their Asiatic origin than for denying the Asiatic origin of our own belief in the Incarnation and Ascension.

V

POLYNESIAN¹ MIGRATIONS

"The Malagash is a Malay, and in their catamarans the Malays have dared both East and West. Aye, the feller that has the catamaran is the Viking of the South and the water's his element. Why're the totem poles in Mexico same as those in Madagascar? Because *they are the same*. Get a globe, Ma'am, and see if the Malays weren't aptly situated for adventure east *or* west. And with such a gift of nature as the catamaran, safe as a gull and swift as an arrow, who's to stop him from overtaking Africa in his wanderings? He settles in Madagascar like birds on an islet—what next but to set his catamaran to flight round the Cape and up the old Ivory? How else came that old ruin that has the looks of Zimbabwe about it? Bonded stones same as Zimbabwe. Aye.

"With all their learning there's few people that rightly understand the strange origins of some of these barbarous races. They weren't always so barbarous.

"Isn't there Zimbabwe, built by the Malagassies, a race of close texture with the Hindus and the Incas of Peru?"

Trader Horn, pp. 73-4, 160, 283.

"ONE of the most surprising phenomena in modern ethnological speculation is the persistent refusal on the part

¹ What is said here of the "Polynesians" relates primarily to the comparatively small caste which ruled and led the so-called "Polynesian Race."

The masses of the Polynesian people were composed of many elements varying in the various islands. In classifications based solely on skull measurements (e.g., Professor Roland B. Dixon's *Racial History of Man*) the dominating white or "Caspian" element is treated as a minor and unimportant one because only a relatively small number of skulls of this type were found in the ancient graves.

Based solely on relative numbers and on dead skull formulas, the estimate is probably correct,—at least as to many areas. However, it is difficult to

of the believers in the fashionable dogma of the spontaneous generation of customs and beliefs to give adequate recognition to the tremendous significance of the admitted facts of man's early wanderings in Oceania. This repression of inconvenient evidence becomes more intelligible when it is realized that no one with any sense of consistency and logic could seriously study the facts of maritime enterprise in the Pacific and retain his simple faith in the independent origin of similar customs and beliefs in the Old and New Worlds."²

tell from a skull in a collection of skulls in a museum whether its living possessor was a king or a grave-digger; and yet that circumstance would make a great difference in the individual's social or political influence.

The white element in Polynesia was relatively small in numbers in many parts of the archipelagoes. But its significance was far greater than its mere numbers imply. From it came the maritime enterprise, the exalted religious conceptions, the megalithic works, the migrations and folk-movements of the mixed peoples under this "Caucasian" leadership which afford the chief interest of the "Polynesians" in the racial and social problems of other lands bordering on the Pacific.

In the course of time this ruling caste itself was modified by the absorption of other racial elements; but it was strongly in evidence in the aristocratic classes when the first European explorers visited Polynesia. Many examples of it are yet to be found in the islands.

The presence of Negrito remains in Hawaii, which Professor Dixon, basing his studies merely on craniometry, regards as inexplicable (*Racial History of Man*, p. 387), does not seem to be so to S. Percy Smith and other New Zealand students, who bring to their aid well authenticated Polynesian traditions. From a familiarity with the actual Polynesia and the living Polynesian people, Mr. Smith states (*Polyn. Soc. Jour.*, XXX) that these Palæ-Alpines (so called by Professor Dixon) were the *Menehene* people,—the slaves of the Polynesian ruling race.

Their presence in Hawaii is easily explained by the very probable assumption that they were brought there as slaves by the white "Caspian" ruling class. Much of the heavy labor of the stone-work and the manning of the canoes is said to have been done by them. Smith and others are of the opinion that some of the boats in which the Polynesian chiefs reached the American coast were manned by black slave crews.

² G. Elliot Smith, *Elephants and Ethnologists*, p. 105.

"The evidence in confirmation of the reality of the exploitation of the whole of Oceania many centuries before the intrusion of Europeans into that area is abundant and precise." *Id.*

The movement from southeastern Asia into the far-scattered archipelagoes of the South Pacific began in primitive times and the active period of these migrations continued for thousands of years. Scarcely an island capable of supporting human life in that vast area from the Philippines to the Galápagos,—580 miles from the Ecuadorian coast,—remained unsettled. The great navigators who reached Hawaii, the Paumotus, New Zealand, and Easter Island, and established permanent settlements there, could more easily have reached the vast continent to the east, less distant from some of these settlements than the settled islands are from each other; and it is assured they did so in many expeditions, the history of which is preserved in the recorded traditions of the Incas.³

Among recorded instances of great voyages, either voluntary or accidental, of Polynesian craft is one of a boat which remained at sea for five months,—supplied with food from fish which were caught on the way and with water from rain.⁴ There are many familiar modern instances of this kind. "A boat from Mangareva in the Paumotus traveled 3,700 nautical miles until it reached Sikayana atoll, east of Malaita, in the Solomons. Had this vessel traveled an equal distance east instead of west from Mangareva, it would have reached America." A native boat from the Carolines went 2,700 kilometers against the wind. There are many well-known similar

³ Montesinos and other early Spanish chroniclers, cited *infra*.

Furthermore, "that this actually happened is proved beyond all possibility of doubt by the nature of the earliest culture of Mexico, Central America, and Peru, its unmistakably Indian aspect, and the equally distinctive traits revealing the influence of Indonesia, Cambodia, and Melanesia."—G. Elliot Smith, *E. & E.*, p. 106.

⁴ G. Elliot Smith, *ibid.*, p. 107.



BOATS OF THE FRIENDLY ISLES

*Drawn from nature by W. Hodges.
From "Voyage Towards the South Pole," by Captain James Cook.*

(See reverse side for description)

BOATS OF THE FRIENDLY ISLES

"In these *proas* or *pahies*, as they called them, from all the accounts we can learn, these people sailed in those seas from island to island for several hundred leagues, the sun serving them for a compass by day and the moon and stars by night."—Captain James Cook, *Journal*, p. 119.

Opposite page 214, *Voyage Towards the South Pole*, Vol. I, Captain Cook gives a detailed plan of construction of one of these double canoes, with its raised platform or deck superstructure, "Distance from out to outside being 13 feet, 9 inches, secured with beams and fore and aft pieces of timber lashed together with sinnet made of cocoanut bass; length 69 feet; depth, exclusive of the deck, 3 feet, 3 inches."

"Nothing can be a more demonstrative evidence of their ingenuity than the construction and make of their canoes which in point of neatness and workmanship exceeded everything of this kind we saw in this sea. . . . All the parts which compose the double canoe are made as strong and light as the nature of the work will admit and may be immersed in water to the very platform without being in danger of filling. Nor is it possible under any circumstance whatever for them to sink so long as they hold together, thus they are not only made vessels of burden but fit for distant navigation. . . . On the platform is built a little shed or hut which screens the crew from the sun and weather and serves for other purposes. They also carry a movable fire-hearth which is a square but shallow trough of wood filled with stones."—*Id.* 215-217.

cases, especially where canoes have lost their course. Many voyages of these great adventurers were carefully planned for months. Boats were especially constructed and ample supplies of provisions were laid in.⁵

The Polynesians,—more daring than the Melanesians,

⁵ S. Percy Smith sets out the ability of the Polynesians to sail against the wind. In "Hawaiki—the Whence of the Maori" (*Polyn. Jour.*, VIII, 10), he cites the Rarotongan tradition of the voyages of "the daring navigator Ui-te-rangiora in his celebrated canoe Te-ivi-o-atea which outshines all the others and shows him to have been a man worthy of taking his place amongst many of our own most fearless navigators in ages long subsequent to the seventh century; also of the history of Te-arua-tanga-nuku, who also in his time was a great voyager."

"The desire of the Ariki, Te-arua-tanga-nuku and all his people, on the completion of the canoe, was to behold the wonderful things seen by those of the vessel Te-ivi-o-atea in former times. These were those wonderful things; the rocks that grow out of the sea in the space beyond Rapa, the monstrous seas, the female that dwells in those mountainous waves, whose tresses wave about in the waters and on the surface of the sea; and the frozen sea of Pia with the deceitful animal of that sea that dives to great depths,—a foggy, misty and dark place not seen by the sun. Other things are like rocks whose summits pierce the skies. They are completely bare and without any vegetation on them."

Smith interprets these reports to refer to the icebergs ("the great flat-topped ice islands . . . usually met with in all parts . . . south of 50° S.," *Encyc. Brit.*) which the daring navigators had seen; to the giant or bull kelp, not known in Polynesia but growing in the southern waters to a length of fifty feet, and to the so-called "sea-elephants" and "sea-lions" which are common in those regions off the South American coast; and the dark, foggy climate of the high latitudes "in the space beyond Rapa" (Easter Island). These traditions sound very much like the tales of the early European navigators, and remind one of the fabulous monsters and marvels pictured in the old European maps, which all turned out to be substantially true.

William Churchill, *Easter Island*, p. 79, speaks of the ancient Polynesians as "adventurous seafarers" and as a race which was "naval in the highest degree." He says, "All of eastward Polynesia was settled by eastward voyages, always full and by on the southeast trade" (p. 81).

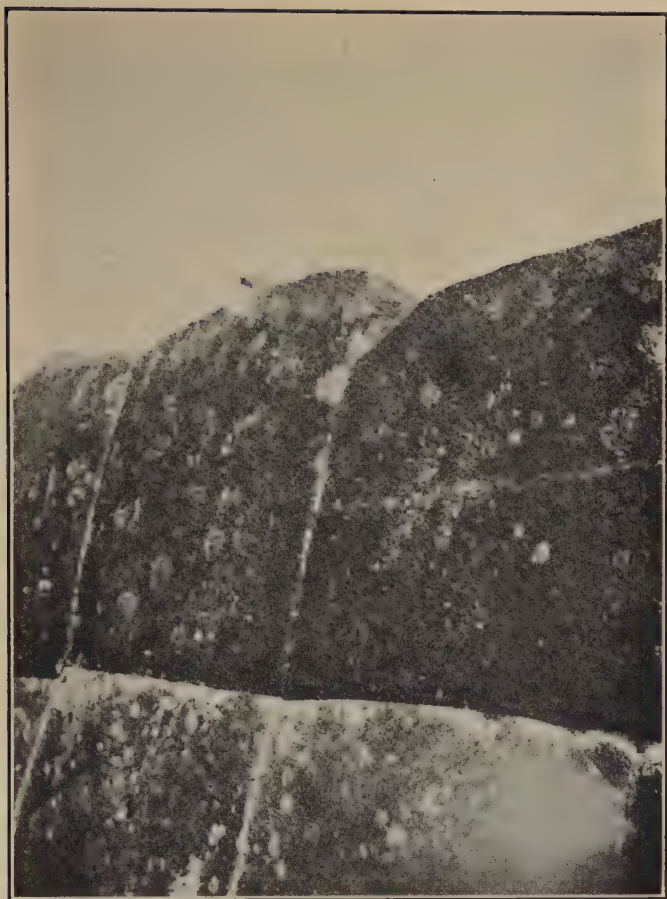
Fornander followed Polynesian traditions in placing the origin of the race on the Asiatic continent. Churchill, while carefully avoiding the expression of any opinion as to the ultimate origin of the race, and giving up the riddle of the megalithic works of Easter Island, Samoa, Tonga, Rapaïti (Oparo), the Carolines, the rows of pillars on Tinian in the Mariannes, as "utterly beyond his comprehension," endorses the reliability of Polynesian traditions.

—took their wives and children with them on colonizing expeditions, definitely prepared with every regard for season and weather. They navigated by the stars and courted the favor of the gods by sacrifices and solemn religious ceremonials. One authority claims that the search for pearls was a great incentive of their daring voyages, as it probably likewise was for the Mayan explorations into the Ohio and Mississippi valleys. In the active era of the great sea voyages which Smith places between the eighth and the thirteenth century, there was regular communication between the Polynesian archipelagoes, and “voyages of several days in double-boats between Samoa, Tonga, and Fiji were quite common up to the time of the European intrusion into the Pacific.”⁶

However, there was a much earlier era of marine activity in the South Pacific, probably by the white ancestors of the Polynesians,—dating thousands of years before the identity of the great race was lost by amalgamation with the Melanesians and other dark indigenous people. These earlier Caucasian people left their monuments in the rock fortresses of New Zealand and the tremendous megalithic structures of the Carolines and Easter Island.

The canoes of the Polynesians were of great size,—some of them 130 feet in length,—and they were capable of carrying as many as 300 people. “For long voyages they were provisioned with living domestic animals, fish, fruit, preserves, etc. Water was carried in bamboos. Fish, as a rule eaten raw, was caught on the way.” Rafts, like those of the Paumotus, with sail and mast, were in common use on the coast of Peru. In fact some of these

⁶ G. Elliot Smith, *E. & E.*, p. 108.



PART OF THE WALLS OF VINAPU PLATFORM,
EASTER ISLAND

From "The Riddle of the Pacific" by J. Macmillan Brown.

Showing the careful tooling of the great stones. Compare with the following photograph of megalithic masonry of Sacsahuaman.



SACSAHUAMAN

Photographed by Figueroa, Cuzco.

are still in actual use by the Indians about Pacasmayo.⁷ There were many American traditions of double boats such as used by the Polynesians, and pre-Columbian boats of this type were found on the west coast of Central America.⁸

America in race and culture was but an extension of Asia; and it is said that in pre-glacial times it was geographically so. However, this last is immaterial as communication by primitive man is still carried on by Bering Strait as freely as though the two continents were still connected; and that there were frequent passages by the bridge of islands (Polynesia) is shown by the settlement of the islands. Columbus was not mistaken when he called the people of the new world "Indians." They were of that and kindred mixed races, and an unbroken line of blood and culture bound together the two shores of the Pacific Ocean.⁹

⁷ An officer of the International Petroleum Company at Talara, on the north coast of Peru, tells me that he has shipped fifty tons of freight in a single voyage on a native *balsa* (raft) a distance of one hundred and fifty miles along the coast.

⁸ G. Elliot Smith, *E. & E.*, pp. 105-9. He quotes extensively from Dr. Georg Friederici, *Malayo-Polynesische Wanderungen*, Vortrag gehalten auf dem XIX Deutschen Geographentage zu Strassburg i. E., 4 Juni, 1914.

The Maori traditions told of migrations made in vessels with two or three masts. The direction was fixed by the moon and stars on clear nights, by the sun by day, and by the direction of the wind on dark nights. The navigators of these vessels had anchors, "floats" for their outriggers, "mahe stones" attached to cords by which they tested the currents and from these estimated the general trend of the wind.

There were awnings to ward off the spray and mats to cover the openings of the sleeping quarters. The code of weather signs by which these ancient sailors prognosticated the weather seems to be but a part and parcel of the present-day universal language of the sea.

Religious rites—*pure*—were performed in the launching of an expedition by sea "so that the course of the vessel might be a true one."—Elsdon Best, "Irihia," *Polyn. Soc. Jour.*, 1927, pp. 340-44.

⁹ Dr. Ales Hrdlicka, "Migrations by the Aleutian Islands and Behring Strait," *New York Times*, Nov. 28, 1926.

The entire practicability of voyages across the Pacific by the great Polynesian navigators in their great canoes and catamarans,—many of their boats carrying sails and equipped with cabins mounted on platforms,—is demonstrated by the daring voyages around the world in our own time by navigators no more skillful than the Polynesians, in boats much smaller,—some of them manned only by a single individual.

This was the case of Captain Joshua Slocum, who sailed around the world alone in the tiny *Spray* in 1898.¹⁰ Thirty years later Captain Harry Pidgeon made his marvelous voyage in the diminutive thirty-foot sloop *Islander*, manned only by himself. He sailed westward from Los Angeles across the Pacific, through the Indian Ocean, around the Cape of Good Hope, thence through the South Atlantic to the Panama Canal, and up the Pacific Coast to Los Angeles again. Pidgeon constructed the *Islander* himself at a cost of \$1,000 for material, besides his labor, which occupied a year.¹¹

Captain Karl Kircheiss sailed a small cutter, manned by himself and four sailors, around the world, covering 34,000 nautical miles. He set out from Hamburg in 1926, passed *via* Spain, the Mediterranean, India, Sumatra, Borneo, Siam, China, Japan, Honolulu, Mexico, the Panama Canal, New York, then to Hamburg again, where he arrived December 26, 1927, to be greeted by the authorities and an "enormous multitude" and saluted by all the vessels in the port fully flagged.¹²

Captain Voss sailed around the world in a three-ton

¹⁰ *National Geographic Magazine*, Feb., 1928, p. 195.

¹¹ Full account with pictures in *National Geographic Magazine*.

¹² Press report in *New York Times*, Dec. 27, 1927.

yacht, whose hull was a dugout like the canoes of the Polynesians.¹³

The German Count Luckner and six companions,—when he had lost his ship, the *Seeadler*, with which he had been raiding Allied merchant ships during the World War,—crossed two thousand miles of the South Pacific in an open lifeboat in search of another ship.¹⁴

Conor O'Brien sailed his twenty-ton yacht, the *Saoirse*, around the world. He left Dublin June 20, 1923, and "anchored there again two years later to the day" after sailing to Cape Town, thence via Melbourne to Auckland and then home by way of Cape Horn.¹⁵

¹³ *The Venturesome Voyages of Captain Voss* (London, 1926). See also "The Voyage of the Tilikum," *Geographical Journal*, May, 1927, p. 486.

H. S. Harris and J. D. Ramsey of Miami, Florida, made the 1,600-mile voyage from Miami to New York in a boat fifteen feet long, April, 1929.

Paul Müller, a German sailor, arrived in Gibara, Cuba, May 5, 1929, after a voyage across the Atlantic in the *Aga*, a twenty-two-foot lifeboat.

Captain Franz Romer, in September, 1928, crossed the Atlantic in a twenty-one-foot boat.

"Prince Rupert, British Columbia, July 27 [1929].—A. L. Voight of Los Angeles arrived here today, traveling from Juneau, Alaska, to New York in a sixteen-foot walrus skin boat. He expects the voyage will occupy a year." (Associated Press Dispatch.)

The young Frenchman, Alain Gerbault, sailed alone "around the world in a ten-ton sloop,"—the thirty-foot *Firecrest*. July 26, 1929, he returned to Havre, France, whence he had set out six years before, and was acclaimed as a national hero. *Literary Digest*, September 7, 1929.

The crossing of the Pacific by Tu-te-rangiatea and other great Polynesian navigators,—with their much larger vessels and crews of able seamen,—was easy by comparison. Like a flash in the dark, there is a vivid glimpse of the moving drama in the graphic Maori phrase: "When the curved rainbow is seen above, Hui-te-rangiora glides swiftly below." Elsdon Best, "Irihia," *Polyn. Soc. Jour.*, 1927, p. 347.

¹⁴ "Buccaneering in a Rowboat," by Lowell Thomas, *World's Work*, Dec., 1927, p. 205.

¹⁵ *Across Three Oceans: A Colonial Voyage in the Yacht Saoirse*, by Conor O'Brien.

The viking ship discovered at Gokstad "represents just such a ship as that in which Eric the Red voyaged to Iceland about 1000 A.D., or in which his son Lief Ericson [Leif Ericsson?] reached the shores of Vineland some years later. . . . She is an open double-ended boat, built to most graceful lines, with a deep rockered keel and considerable sheer. The length is 79 feet, breadth 16.5 feet, and she pulled thirty-two oars and must have carried a crew of about seventy men."¹⁶ The catamarans of the Malays and Polynesians were larger, carried more people, and furthermore the waters of the South Pacific over which they made their great voyages were milder than those of the "rude" North Atlantic crossed by the Vikings in their open boats.¹⁷

The *Vittoria*, in which Ferdinand Magellan,—and his successors after he was killed in the Philippines,—made the first circumnavigation of the earth was only of eighty-five tons' displacement. It was the only survivor of the squadron which sailed from Seville August 10, 1519. It sailed again up the Guadalquivir to the port of Seville three years later after having passed through the Straits of

¹⁶ G. S. Laird Clowes, "Ships of Early Explorers," *Geographical Journal*, March, 1927. Mr. Clowes seems to confuse Iceland with Greenland, and is somewhat belated in his dates.

¹⁷ S. Percy Smith says: "I hold that there are extremely few islands in the Pacific within the temperate zone that have not been visited by the Polynesians during the high-day of their nautical enterprise which practically ceased some five hundred years ago." *Polyn. Soc. Jour.*, XI (1902), p. 97.

"No bolder or more skillful race of sea-rovers ever existed than the Polynesian progenitors of the true Maori." Lieut. Col. Gudgeon, *Polyn. Soc. Jour.*, XI, 180.

"This indifference to the dangers and discomforts incidental to a long and dreary sea voyage in vessels that at the best were not more safe, if indeed so safe, as an ordinary whale-boat [in the judgment of the present author this is under-rating the seaworthiness of the great double canoes

Magellan, crossed the Pacific, the Indian Ocean, rounded the Cape of Good Hope, and traversed, for the second time, the length of the South Atlantic.

Martin Frobisher made his first voyage of discovery in the North Atlantic (1576-77) in the *Gabriel* of twenty tons.¹⁸ At the outset of his first voyage he was accompanied by a pinnace of only ten tons which, however, was lost. Columbus' *Niña* of forty tons, the *Endeavor*, 97 feet long, with which ship Captain James Cook made his great discoveries in the Pacific, the *Sea Hen* of Tasman, the *Cygnets* of Dampier, were not much larger, some of them smaller, than the catamarans which they encountered in the South Seas.

Speaking of old pictures of the early ships, Mr. Laird Clowes¹⁹ remarks that "it is the smallness of the ships of the great explorers which defeated the artists, for to their minds their size ill befitted the great deeds that were done in them." The same observations might be made in regard to the ships of the Polynesians; and of them it might also be said, as was remarked by Dr. Hogarth, Presi-

of the Polynesians] must be the result of evolution; only to be attained by a race naturally brave and adventurous. It must indeed be the result of familiarity with danger during many generations of units fortified by the tradition of numerous successful though hazardous voyages." *Ibid*, p. 180.

Col. Gudgeon himself gives a better estimate of the seaworthiness of the Polynesian ships when he says in the same article, speaking of the great canoes (some of them over a hundred feet long with twelve-foot holds), and the "navigating courage and skill" of the Polynesians: "The pioneer canoes of the Maori . . . were probably as seaworthy as the vessels by the aid of which the New World was discovered, whether by Columbus or long ages before by the Norsemen."

Judge Fornander (*The Polynesian Race*) says that he himself saw one of the twin canoes of Kamehameha I, abandoned and in a state of decay. It was 108 feet long.

¹⁸ G. S. Laird Clowes, "Ships of Early Explorers," *supra*.

¹⁹ *Ibid*.

dent of the Royal Geographical Society, in commenting upon Mr. Clowes' lecture²⁰ and referring to the ships of early European explorers: "The ships were astonishingly small, but the explorations, as you know, were fraught with the greatest results in their own time and for all time to come."

These ships in which European navigators searched out the most remote parts of the globe were much smaller than the great junks of the Chinese which in ancient times traded as far west as the Persian Gulf, perhaps further, and no doubt eastward to America.

"Marco Polo emphasizes the comparative unseaworthiness of these vessels [the ships of Ormuz in the Persian Gulf] and contrasts them with the great size and strength of the Chinese junks, thus unintentionally explaining why the sea-borne trade, even as far west as the Persian Gulf, was in the hands of the Chinese.

"In his well-known description of Chinese junks he mentions their great size, with as many as fifty or sixty cabins, their internal subdivision into water-tight compartments, and the fact that they were rigged with four permanent masts and two others which were sometimes stepped. He describes in fact, except for their diminished size, the Chinese junks of today, or at most a few years ago, with their four masts—fore, main, and two mizzen, stepped side by side on the poop—and with a fore and a main topmast for use when winds were light."²¹

Chinese ships are represented as reaching the neighborhood of the Cape of Good Hope before the time of Marco

²⁰ *Geographical Journal*, March, 1927, p. 231.

²¹ G. S. Laird Clowes, "Ships of Early Explorers," *supra*.

Polo; so that there can be little doubt of their passage also in the opposite direction. "Even more interesting are the vessels shown in Fra Mauro's Map of 1457, which is generally considered to be largely based on Marco Polo's travels. . . . In the Mediterranean are a number of galleys and lateen-rigged vessels without forecastles, and none of them with more than one mast. In the Gulf of Guinea, the uttermost point of sea exploration of that period, is shown a two-masted vessel of rather uncertain type, but as soon as we have rounded what is now known as the Cape of Good Hope we fall in with a number of extraordinary lofty vessels with three or four masts and high after-castles. Both bow and stern are very square and highly decorated, and the rudder is shown as projecting below the stern, in a curiously detached position. I am unaware that any explanation of these craft has previously been attempted, but to my mind they represent with surprising accuracy the Chinese junks which Marco Polo describes as carrying the bulk of the trade of the Indian Seas. . . .

"It was the introduction of the three-masted ship, with its improved ability to contend with adverse winds, which made possible the great voyages of discovery of the end of the fifteenth century, of Columbus to the West Indies, of Vasco da Gama to India, and of the Cabots to Newfoundland, and it is a curious thought that this great development may really have been due to the introduction into Europe of accounts of the multiple-masted Chinese junks which traded so effectively in the Indian Ocean."²²

This is a surprising thought in view of the still more

²² "Ships of Early Explorers," *Geographical Journal*, *supra*, p. 222.

surprising skeptical attitude of the conventional schools of archæology as to the activity and diffusion by sea of ancient Asiatic commerce and culture. But the inheritance by Europe of the art and progress of navigation from Asia is not strange in view of our inheritance from the same source of our religion, architecture, and culture in general.

The prehistoric civilization of Asia and its faring forth, both east and west, to most parts of the world, has been underestimated. The extent to which the navigators of southeastern Asia "surveyed mankind from China to Peru" has not been understood.

Recent excavation by the Archæology Department of the Indian Government of "sites whose history goes back to 3000 B.C. links the ancient civilization of the Indus valley with the other great civilizations of the river valleys,—the Nile in Egypt, the Euphrates and Tigris in Mesopotamia, the Karun in Persia, and the Helmund in Afghanistan." ²³

It is stated that this "Indus civilization" extended "westward into Baluchistan between India and Persia." It is more likely that a race of nomad herdsmen from the high plateaus of central Asia in much earlier times brought the rudiments of this culture along with their cattle to the alluvial river valleys and there developed the agriculture and settled mode of life out of which flowered and from which were redistributed, both towards the east and towards the west, its later arts and religion.

"In the opinion of Sir John Marshall, Director Gen-

²³ *New York Times*, Feb. 5, 1928.

eral of the Indian archæological survey, the excavations have shown . . . that there must have been close inter-communication between the Indus and the Tigris-Euphrates maintained *partly by sea* and partly by land across the Persian plateau. . . .

"It is clear that this civilization formed a part of the far-flung ancient culture of Europe and Asia *that extended from the Adriatic to Japan*,"²⁴ and, it may be added, to America.

²⁴ *New York Times*, *supra*. (Italics mine. M. P.)

"A certain Chief and his companions set forth in their vessel on an exploring voyage without any definite objective and so reached the land of Irihia. . . .

"Now the cause of that land of Irihia becoming known to the folk of Uru was that Tu-te-rangiatea made it known to the people of the interior of Uru,—*'There is a fine land called Irihia to the eastward. The people dwelling there are dark-skinned, tall and thin, of spare build, with slim calves. Their eyes are restless, shifty, and side-glancing. . . .'*

"The fame of the abundant food products of the land of Irihia, and the fame of the sapless food, of which the true name was *ari*, spread afar. The fame of this land reached a certain place named Uru, situated in the interior of the mainland far distant from Irihia. . . . In later times a party of migrants of the land of Uru came away on account of certain fighting. Such was the cause of *Puhi-rangi* migrating to Irihia, to the hot country where grew the bloodless (sapless) food products; and this bloodless food was the second cause of his coming to Irihia. Now this land has two names, *Irihia* and *Iri-rangi*, so called on account of the great heat of the sun; such is the significance of *Iri-rangi*.

" . . . Tidings of those folk of Irihia reached and were discussed at the many places belonging to *Puhi-rangi*, even to Uru. The Chiefs of Uru proposed that a party of their people should proceed to Irihia in order to ascertain the aspect of the report of the people that had been mentioned. The well-born young men of Kopura-tahi were assembled by him. Five hundred was the strength of his party of chieftains that accompanied him." Maori tradition, Elsdon Best, "*Irihia*," *Polyn. Soc. Jour.*, 1927, pp. 334-38.

The lordly immigrants parceled out the land and the aborigines of the new country among their chiefs much after the fashion of the *encomiendas* of the Spanish *Conquistadores*.

"*Vrihia* was a Sanskrit name for India." Elsdon Best, *supra*, p. 322.

"*Ari* is an old Dravidian name for rice." *Ibid*.

Compare the foregoing references to *Uru* with *Ur* and *Uri* of the Chaldean Sumerians. "Sumer and Sumerians," *Encyc. Brit.* 11th ed.; "*mat*

Shumeri u Akkadî = non-Semitic *Kêngi-Uri* of the Babylonian inscriptions."

As to other migrations of these people, see apparent traces in *Samaria* in the west (said to be from *Shemer*, of Aramaic Mesopotamian origin, and to signify "*Outlook Hill*"); and towards the east, in the Pacific, various place-names in Java and New Guinea, such as *Samarai*, a small island lying off the extreme eastern tip of New Guinea. *Samar-kand* may throw light on still earlier origins.

Desperate fighting was also the cause of subsequent migrations from Irihia into the "eastern ocean." The "heaps of slain served as breast-works for the combatants." "The fighting continued for five months before it ceased. . . . Such was the cause of the migration hitherward of the Maori folk of Irihia to Tawhiti-nui, thence to Ahu, to Maui, to Hawaiki, to Rangiatea, and other islands of that ocean,—even to Rarotonga, to Tongatapu, to Pango-pango, and other isles of Tawhiti." "Irihia," *supra*, pp. 335, 348-9.

"The migrants [from Irihia into the eastern ocean] sailed ever eastward and in no case did one lone vessel undertake such a voyage; there would be two or more, and so the sea-road voyaging would be conducted in a proper manner." "Irihia," *supra*, p. 335.

Ur was called *Uruk* by the Sumerians. *New Light on Ancient Ur*, by M. E. L. Mallowan, *National Geographic Magazine* (January 1930), LVII, 102. This was merely the adjective form of Uru, meaning *light* or *day*,—that is to say, the land of the sun. It is interesting to note that the same name appears in *Uru-bamba*, that is, the plain of Uru,—the ancient home of the Ayar in Peru. (Cf. *infra*, p. 200, note 5.)

VI

ARRIVAL OF POLYNESIAN GIANTS IN PERU

As kings they conquered and as kings they ruled,
As vikings dared the tempests of her rages,
And dying, in the stones their serfs had tooled
They'd live for countless ages.

J. MACMILLAN BROWN, *The Riddle of the Pacific*.

FOR one cause and another,—perhaps the general debilitating influence which seems to have been the effect of the contact of the Europeans upon more primitive peoples everywhere,—the skill and enterprise of the Polynesians as mariners and explorers have greatly declined since their discovery by the Spanish, French, Dutch, and English navigators. There is evidence that long before this there was a period of immense maritime activity throughout Oceania.

The fact is that while a strange reluctance to admit the obvious conclusion seems to have pervaded the study of this subject, it is very probable that the passage of the Pacific in this way has been frequent from very early to comparatively modern times. The traditional account reported by Sarmiento that merchants from the Galápagos Islands had appeared on the Peruvian coast at the time of the conquest of northern Peru by Tupac Inca Yupanqui, would seem to indicate a more or less regular intercourse.

Aside from the conclusive circumstantial proof, as well as the inherent probability that the Polynesians reached the

Peruvian coast in various epochs, there are many positive traditions of their actual arrival. In the reign of the Ayar Tacco Ccapac a "great throng of strange people disembarked on the coasts from balsas and canoes which formed a great fleet,"—and settled in the land,¹ "especially along the watercourses." "Men of great stature" went in advance of the rest. These were probably the chiefs, who throughout Polynesia are larger than the common people. They belonged to the aristocratic caste; and in some instances,—as in the case of Kamehameha, king of Hawaii, who lifted the great stone still lying at Hilo,—were chosen as chiefs because of their size, courage, and strength. Some of them were veritable giants, as indeed many of the better-class Polynesians are today.

The spies sent out by the king, Ayar Tacco Ccapac, reported that "the giants were settling on the whole coast." Most of these immigrants remained in the lowlands but a few went up into the mountains and settled at Huaitara and Quinoa in the first cordillera above the head of the valley of Pisco. There is a curious note that they "completed some buildings which they found begun,—using instruments of iron which they had brought from their own land."² It is said they occupied Pachacamac and built the temple there. The king's spies also reported that "very large and tall men had arrived at the cape which today we call Santa Elena and that they were ruling that land from Puerto Viejo" (in Ecuador).³

¹ Montesinos, *Memorias Antiguas del Perú* (Hak. Soc.), p. 39.

² Verrill found an iron tool in the very ancient ruins he excavated at Panama; and there are recently discovered indications that iron was used in the Orient much earlier than had previously been supposed.

³ Montesinos, *supra*, p. 40.

Markham ⁴ suggests that "the 'giants' here referred to are doubtless merely the coast dwellers or perhaps some new waves of immigration from the north." This is hardly possible, however, as the coast tribes were not notably larger or stronger than the Quichuas and were even smaller than the Ayar leaders. Furthermore these coast tribes were well known to the mountain people and would not have been described as "strange people coming from the sea." The spies sent out by the king of Cuzco reported the giants as landing "on the whole coast" and mentioned especially Santa Elena and Pachacamac,—north and south respectively of the Chimus. If the "strange people" had been the Chimus, as suggested by Montesinos and others, this would have been stated by the king's scouts. On the contrary, on the north coast itself near where the Chimus lived, there was the same tradition of strangers of phenomenal size coming from the sea.

The tradition mentions another interesting feature in connection with the immigrants' work in stone. On the north coast where they landed there was no water. The giants sank wells to the bedrock and walled them with stone. From these they obtained very cool and delicious fresh water. The newcomers were fishermen and like the Polynesians supplied themselves with a great part of their food in this way, catching "great quantities" of fish in nets. There are some quaint remarks in the chronicles about the amount of food the giants consumed. Undoubtedly this impressed the natives as much of it was commandeered from them.

The authenticity of the tradition seems more probable

⁴ Note on Montesinos, *supra*, p. 40.

as it is reported by various independent chroniclers. Cieza de Leon makes the very sensible suggestion that the reports, both as to the size of the invaders and as to their deeds, were no doubt greatly exaggerated in the vulgar tradition. This has always been the case in similar circumstances, from the Greek legendary heroes to modern instances in the United States. The tradition became so vivid that the Peruvian natives in later times even attributed to the giant immigrants the bones of mastodons found on the coast.

Leon says the coast natives had heard from their fathers that the giants "came by the sea in junks like great ships."

On a treeless coast, as that of Peru, it would be difficult or impossible to secure material for a fleet of canoes, balsas, or junks sufficient to carry an army or large migration, such as that of the giants.

If the Chimus had planned a war expedition, they would have moved by land along the coast, which is easily traversable across the intervening desert spaces from one rich and well-watered valley to another; or if their expedition had been against the mountain people they would have come directly up the valleys of the Moche and Chicama, or, as Pizarro did later, up the Jequetepeque to Cajamarca and the pleasant regions of the Marañon and Huallaga lying beyond. Such balsas as the Chimus had were made largely from reeds or from wood obtained in the Gulf of Guayaquil and about Santa Elena, the very place where some of the "strange" race of "giants" landed; and it must have been from the same region that the conqueror Tupac Yupanqui obtained the materials for

the craft with which he transported an army to the Galápagos.

Cieza de Leon passed down the coast in 1550 and obtained the traditions which he relates from the natives there, and not in the mountains. Montesinos, on the other hand, reports the legends which he obtained at Cuzco, so that we have the story from both viewpoints, which makes it quite easy to interpret. If the irruption of the giants who came to the coast in a great fleet of junks and canoes had been merely a movement of the coast people themselves, the tradition would have made this clear; but the whole legend as to the character of the immigrants, the manner in which they came, and their dealings with the people of the coast is inconsistent with such a theory.⁵

Both Montesinos and Leon enlarge upon the vice of sodomy to which the giants were addicted. Leon says that those who landed about Santa Elena brought no women with them and as the native women "did not accommodate them on account of their size," they practiced sodomy with each other "publicly and openly." Montesinos records that the spies of Ayar Tacco reported that the natives of the coast were fleeing from the giants "because they used their bodies so ill," and the chronicler makes the occult remark, "In my opinion it was not that they fled from the sin for they themselves had it also, but that they

⁵ "Some who had settled in New Zealand were touched with the wanderlust, or were driven out by stronger and more warlike newcomers. They would not go far south till they got into the zone of the westerlies, which blow steadily in the same direction all the year round. Once in front of these, they could not avoid getting on to the south coast of Chile and being borne north by the constant southerly winds. The undefended cities of the coast of Peru, busy with irrigation and the making of pottery and gold and silverware, would be their natural prey."—J. Macmillan Brown, *The Riddle of the Pacific*, p. 267.

fled from the danger of the instrument with which the giants took their lives." Both Leon and Montesinos record that as a punishment for the excesses of their unnatural vice, like Sodom and Gomorrah, they were destroyed by fire from heaven.⁶ These chronicles of Leon and Montesinos as to the openness of this vice are corroborated in vivid and striking forms by the large quantity of pornographic ceramics discovered in the huacas.⁷

This invasion of giants furthermore could not have been by the Chimus as the Chimus had not established themselves on the coast at that time. It has been shown by Uhle and others that the Chimu culture was the latest of those which preceded the Inca rule on the coast, and that it itself was preceded by at least three others,—the "Tiahuanaco" culture being the oldest and at the same time the most highly developed, showing that it had been evolved through a long period of time.

This invasion of giants took place shortly after the most archaic epoch of which the traditions tell. Ayar Tacco Ccapac, king of Cuzco, is the first Ayar king in the list of Blas Valera accepted by Means as a real person. The twelve kings named by Valera, as given in Montesinos, as ruling in Cuzco before the Ayar Tacco, are put down by Means as vague and nameless "proto-historic chiefs." The Chimu culture had not arisen at

⁶ Cieza de Leon, *Crónicas*, *supra* (Madrid, 1922), p. 221 *et seq.*

⁷ As an indication of the keenness of observation of Cieza de Leon, he reports petroleum seepages,—"bitumen deposits," he calls them,—(pp. 183-84) which were "discovered" three hundred years later and are now being exploited by American and British enterprise and capital.

this time and did not for many centuries afterwards. The tradition tells of eighty monarchs who ruled at Cuzco and at Tampu-tocco after the time of this irruption of the giants and before the first Inca.

Most of "the foreigners remained on the coast, it appearing to them impossible that there should be people beyond such lofty and jagged mountains." Some of them, however, founded settlements at Cajamarca and Huaitara⁸ and no doubt their descendants reached Chachapoyas and Huanuco. There is a touch of unconscious humor in the chronicle where it says that "the king, Ayar Tacco, set forth from Cuzco with a larger army with the intention of reducing and punishing them. He arrived at Andaguailas and there he learned that the enemy were numerous, ugly, and big. He changed his plan and contented himself with placing garrisons in Vilcas and Lima Tambo, giving definite orders to the Captains that they were not to let these strange people get to Cuzco."

The remark that the newcomers did not suppose that people could live beyond such "lofty and jagged mountains" is quite enlightening as showing that the invaders were strangers to the country and could not have been the indigenous people from the north, who undoubtedly knew that the mountains were inhabited, and who probably carried on more or less trade with the Quichuas and their Ayar rulers. To suppose that the energetic and intelligent people of the near-by mountains were not familiar with the open coast a few miles away and with the

⁸ Montesinos, *supra*, p. 42.

people who inhabited it would seem more or less absurd. In fact the chronicler expressly states that the coast people were killed or subjected by the invaders.

So far from there being reason to suppose that the tribes established on the Peruvian shore-line or those from further north on the continent were of unusual size, or would have been regarded as giants by the Ayars of Cuzco, it is true that both the Yungas of the coast and the Quichuas of the cordilleras were probably then and are now of small size and slight build, as compared with Scandinavians or Polynesians; neither of these Central or South American people compared in height with the best types of the North American Indians, such as the Sioux, Iroquois, or Cherokees, especially with the chiefs and leaders of those great races. There is no reason to suppose that even in ancient times there was any less relative difference.

The coast Indians or Yungas are many times mentioned in the traditions, but they are not described as giants nor as of a size or strength superior to the Serranos. Certainly no such discrepancy existed at the time of the arrival of the Spaniards. On the other hand it was on the coast itself, as related by Leon, that the natives were frightened by the size and strength of the new arrivals. What is said of the Yungas is equally applicable to the Mexicans, Mayas, Quichés, or other Indians on the mainland further north. "The earliest population [of the Chicama valley, one of the principal seats of the Chimu people] was of the moderate-statured brachycephalic race; that is, the prevailing one on the Peruvian coast between Pacasmayo and Pisco or farther, and which is

fundamentally of the same type as a large portion of the inhabitants of Ecuador, Colombia, Central America, and Yucatan.”⁹

There are indubitable evidences that the mass of the Peruvian Indians from archaic times were immigrants or descendants of immigrants from the north,—probably before any arrivals from Polynesia; but there is no mention, in the traditions, of any race of giants among them,—though the evidence is that both at the time of the arrival of Balboa and Pizarro on the Pacific, and for ages before that, a regular trade was carried on along the coast reaching directly and indirectly from north of Mexico to Chile and that there was a general mutual acquaintance between these races north and south. They were, as their descendants are today, of the same basic stock and fundamental type modified by environment, and with varying degrees and proportions of mixture and amalgamation with immigrant races from Polynesia or from further west or from the north. It is altogether likely that there were slight infusions now and then from the earliest times from Europe and Africa. But there was no race of giants in Mexico or Central America.

On the other hand there was in remote times and is now a race of giants in Polynesia,—that is in the “South Sea,” from which, as the legends specifically state, the giants came to Peru. Any one who has traveled in the South Pacific must have been impressed with the huge size and magnificent physique of the Polynesians. Quatrefages estimated the Tongas and Samoans to be the tallest people

⁹ A. L. Kroeber, *Ancient Pottery from Trujillo* (Field Museum of Natural History, Chicago, 1926), p. 40, citing A. Hrdlicka, *Anthropological Exploration in Peru*.

on earth, and their weight and strength is in proportion to their height. Today in Honolulu, especially among the aristocratic upper class, Hawaiians can be seen,—men and women,—of as magnificent physique as any people in the world.

If a party of them landed today in a village of Peruvian Indians, either Quichuas or Yungas, they would be considered by the natives as giants,—six feet, and many of them six feet five inches in height, 200 or more pounds in weight; in comparison with the natives, about five feet four inches or five feet six inches in height and weighing generally from 130 to 150 pounds, these powerful South Sea Islanders would be in truth veritable giants. Travelers in the Paumotus,—the South Sea island group nearest to South America, with intervening islands,—have written of the size and strength of the inhabitants. The tradition reported by Kimmich, as well as by Leon and Montesinos, that some of these “giant” immigrants went inland to Cajamarca,—whence they no doubt spread to the temperate hill country beyond the Marañon in archaic times,—may account for such colossal monuments in stone as the temple of Cuelap and its remains of six-foot, red-headed men.¹⁰

¹⁰ Of the hypotheses proposed by way of explaining the origin of the Americans in general and the ancient Peruvians in particular, that which has the strongest scientific foundation is the supposition that the American continent received immigrants of diverse kinds who arrived in successive epochs, forming sporadic groups.

“Of these various immigrations it is most probable that those which arrived on the coast of Peru came from Asia along the route of the islands of Oceania; a continent whose structure has undergone profound changes, of which one of the proofs is the shape of Easter Island and the monuments found there, also the traces of archaic pictographs discovered in Rupa Rupa, and also in the islands of Lake Titicaca, also in the traditions preserved by the ancient inhabitants of the Peruvian coast.” Horacio H.

Urteaga, "Las Antiguas Civilizaciones y Razas del Perú," *Boł. Soc. Geog. de Lima*, XXXV (1919), 3rd and 4th quarter, 290-91.

"There is every reason to believe that the Polynesians are ethnologically a far older race than the Malays. . . . Joseph Deniker declares the Polynesians a separate ethnic group of the Indo-Pacific area, and in this view he is followed by A. H. Keane, who suggests that they are a branch of the Caucasian division of mankind who possibly migrated in the Neolithic period from the Asiatic mainland. Of the migration itself no doubt is now felt, but the first entrance of the Polynesians into the Pacific must have been an event so remote that neither by tradition nor otherwise can it be even approximately fixed. The journey of these Caucasians would naturally be in stages." "Polynesia," *Encyc. Brit.*, 11th ed.

While Hrdlicka reports that the basic ancient population of the coast was broad-headed (brachycephalic) like the Mexicans and Central Americans, the skulls found buried with the very ancient colored and figured pottery in the Moche valley and in the graves of the proto-Nasca people further south,—“the first epoch of Ica,—are in greater part dolichocephalic” (that is of the type of the Polynesians), Uhle, *Boł. Soc. Geog. de Lima*, XXX (1914), 3rd and 4th quarter, 70-71. But anthropological classifications made on this basis are extremely uncertain.

VII

INVASIONS FROM THE SOUTH

THIS wave of immigration which arrived by sea and spread along the Peruvian coast is by no means the only one which the traditions tell of, and there were, no doubt, many arrivals both before and after, both by sea and by land, of which all record is lost or whose tradition was merged in the general account of such migrations in various ages. No doubt the ancestors of the Ayar Tacco himself had come in the same way from the "South Sea," and had perhaps long since partly lost their original type by intermarriage in the families of the indigenous chiefs, notwithstanding all the laws of caste set up in the futile struggle to preserve their racial type.

In some of their expeditions these parties of immigrants brought *black men* with them just as Tupac Inca Yupanqui did on his return from Galápagos. In the great invasion which led to the overthrow of the Amauta line when the Ayar King Titu Yupanqui Pachacuti was killed in the pass of the Vilcanota, the leaders of the attacking armies, coming "through the Andes" from the south, were described as "ferocious men" who "had some black men among them."¹

It seems very probable that these were Polynesian chiefs with their followers who had brought with them black Melanesian recruits or slaves, and who had probably

¹ Montesinos, *Memorias Antiguas del Perú*, p. 60.

landed on the south coast and in the course of time had gained influence with the local tribes to such an extent as to be able to lead them north against the rich Ayar kingdom in the valley of the Vilcanota. The colossal stone fortresses at strategic points from Pucará over the pass and as far down the Vilcanota valley as Salapunco are indubitable proof of the desperate struggle which was made by the Ayars to hold these fertile lands.

Before this in the reign of Huillcanota Amauta, putative fifty-fifth king in Montesinos' list, "hordes of people from Tucumán" attempted to invade the Vilcanota but were defeated in the pass, whence the Ayar king assumed the name of the place of his victory.

The chronicler relates that "also at this time there came through the Andes a large number of tribes who surrendered forthwith on condition that they be given lands for sowing, and they said that they did not come to bring war but that they were fleeing from some men of very large body who had taken away their lands from them, because of which they had come seeking some place where they might live. They gave information to the effect that having left the plains where they lived,—a very fine and rich land,—they had passed on their way thence through many great swamps and thick jungles full of wild animals, and that, without knowing where they were going, they had arrived in these parts."²

A fairly reasonable and apparently the only plausible explanation of this legend is that the rich lands in the south from which these men had been driven were the fertile plains of the Plate; and the swamps and jungles

² Montesinos, *supra*, pp. 56-7.

full of wild beasts, in which they had taken refuge, were, perhaps, the chacos of Argentina and Bolivia (the Gran Chaco of Brazil, to the north). They were prevented from going further northeast by the jungles, and perhaps by hostile Indians, and the only way left open was up the quebradas of the streams which flowed southeastward from the great mass of the Bolivian Andes. This brought them to the great thoroughfare of the intercordilleran pampa.

The "men of very large body" who drove these fugitives from their rich lands (it is most interesting to note that in all these struggles *lands*, "*rich lands*," were the lure of migration and battle) were probably Caucasians who had been carried to the Chilean coast by the South Pacific current, which breaks on the southern coast of the continent, or had come from Easter Island or other islands further west.⁸ It is not at all unlikely that the descendants of these same Caucasians from the South Seas were those who, many generations later, with their black slaves, followed the path of the fugitives their fathers had driven

⁸ The South Pacific "drift" flows southward in a great curve through the channel between Australia and New Zealand. Quatrefages calls it the New Holland (New Zealand) current. It sweeps in broad lines around the southern shores of New Zealand and flows eastward along the fiftieth degree of South latitude to the south coast of Chile. By reason of the curvature of the earth, the distance across the Pacific along this line is comparatively short. The ocean stream turns to the north, close along the continental shore,—where it is called the Humboldt current. With its cold waters from the South Pacific it tempers the climate of the tropics as far north as Cape Blanco.

A westerly division of the same current forms the inner periphery of the great South Pacific circular drift. Breaking off from the eastern division at about 160° West longitude, it flows in a northeasterly direction to the southeast of Easter Island, turning northward through the small archipelago of St. Ambrose near the north Chilean coast. As these streams have controlled the climate of the Chilean and Peruvian coasts they have, no doubt, also been important factors in their population.

out, up the prehistoric thoroughfare of the pampa, killed the king of Cuzco in the battle-gap of the Vilcanota, and plunged the Ayar kingdom into its dark ages.

As throughout Polynesia and elsewhere, it was a war between kinsmen,—of Aryan against Aryan. The defeat of the Ayars in the pass of Vilcanota was followed by governmental confusion, disintegration of the kingdom, social disorder, moral and racial decay, and invasion by a “multitude of tribes which came from all directions.” “Thus was the government of the Peruvian monarchy lost and destroyed. It did not come to its own for 400 years and the knowledge of letters was lost.” The Ayars maintained their superior discipline and the service of the religion of Viracocha in the romantic and picturesque fastnesses of the Vilcapampa. In a subsequent generation, when it was sought to revive letters, the effort was suppressed by the Vilcapampa monarch, Tupac Cauri, on the advice of a priest, on penalty of death.⁴

Much earlier than any of the foregoing, Montesinos relates that in the archaic period of the mythical Manco Ccapac I, second of the list of putative kings (among those whom Means groups as unnamed “protohistoric chiefs”), “hordes of strangers” arrived at Cuzco. “The Chief of them went to where the King was and told him that they had not come to make war but merely in search of good lands on which to live and sow their crops and raise their cattle.” Lands were assigned to them. Some of them were “very tall men of lusty limbs” (*atumrunas*).⁵

⁴ Montesinos, *supra*, p. 64.

⁵ Montesinos, *supra*, pp. 12-13.

In general outline the tradition as recorded by Montesinos, no doubt, correctly describes the early peopling of Peru; "many came by way of Chile, others through the Andes, others by way of Tierra Firme [probably meaning the Isthmus of Panama] and the South Seas";⁶ but the process pictured here in one broad stroke was the work of many centuries. That is often the value as well as the practicability of tradition. It condenses in a sentence the general features of the history of many ages.

There was a universal Inca tradition reported by Cieza de Leon, Sarmiento, and Salcamayhua of a *white teacher* who had appeared in the highlands in the very earliest times and given the people their civilization. He was called *Tonapá* or *Tarapacá*,—the latter word meaning eagle, the god-bird of the Indo-Aryans.⁷ Cieza de Leon relates⁸ that this legendary leader was first seen coming from the south,—“a white man of great stature who, by his aspect and presence, called forth great veneration and obedience. . . . They say this man went on towards the north working these marvels along the way of the mountains; and that he never more returned so as to be seen. In many places he gave orders to men how they should live and spoke lovingly to them, and with much intelligence, admonishing them that they should do good and no evil or injury to one another and that they should be loving and charitable to all.”

Sarmiento says that this teacher was “white and dressed

⁶ Montesinos, *supra*, p. 3.

⁷ Salcamayhua, “Antiquities of Peru,” in *Narratives of the Rites and Laws of the Yncas*, ed. C. R. Markham (Hak. Soc.), p. 71.

⁸ *La Crónica, supra*, pp. 5-6.

in a white robe like an alb, secured round the waist, and that he carried a staff and a book in his hands.”⁹ He came very tired to the village of a chief called Apo-Tampu. The chief heard him willingly but his vassals did not favor the stranger. He remained as the guest of Apo-Tampu and preached to the people “with loving words.” “From that day the wanderer was a guest of Apo-Tampu, to whom it is said that he gave a stick from his own staff, and, through this Apo-Tampu, the people listened with attention to the words of the stranger, receiving the stick from his hands. Thus they received what he preached in a stick, marking and scoring on it each chapter of his precepts.” In his missions the white teacher was often persecuted and “slept in the fields without other covering than the long shirt he wore, a mantle, and a book.” He worked miracles and punished the wicked.¹⁰

As in Central America, India, and elsewhere under similar circumstances this early teacher was deified. Temples were erected to him and his image placed in them. Cieza de Leon was told that when Pizarro entered Cuzco there was in that city a stone image of a man clothed in a long vestment with beads in his hands.¹¹

No doubt these legends relate to some early white Aryan priest and chief who actually reached Peru,—apotheosized in the people’s memories. This belief was mixed with features of Asiatic religious legends, with probably a touch of Roman Catholicism as it passed

⁹ *History of the Incas* (Hak. Soc.), p. 35.

¹⁰ *Narratives of the Rites, etc., supra*, pp. 71-3.

¹¹ *La Crónica, supra*, p. 306.

through the hands of the Spanish chroniclers.¹² In its simple elementary features of a white teacher and leader it is given credence as a genuine popular tradition (no doubt based on an actual event) by the independent and concordant relations of the various chroniclers.

¹² Salcamayhua relates (p. 72): "Tonapá, in his wanderings, came to the mountains of Caravaya, where he erected a very large cross, and he carried it on his shoulders to the mountain of Carapucu, where he preached in a loud voice and shed tears. . . . A daughter of a chief of that province was sprinkled on the head with water. . . . Tonapá was taken prisoner and shorn," etc. There follows a great conglomeration of Spanish and Indian fable. Some of the Spanish fanatics endeavored to claim Tonapá as the apostle St. Thomas, and some of the histories evidently were formed to give color to this assumption which was of use to them in their mission work among the Indians.

VIII

OCEAN CURRENTS AS AFFECTING POLYNESIAN NAVIGATION

THE great current flowing westward near the equator, a product of the trade winds, was not a deterrent to eastward migrations.¹ The islands of the South Pacific were settled by people of undoubted Asiatic origin who often made long voyages against the ordinary course of ocean currents. Easter Island, according to the tradition of its people, was settled from Rapa-iti (Little Rapa, or Oparo, one of the Austral archipelago), 1,900 nautical miles to the west; and this is corroborated by the name they gave to their island,—Rapa-nui (Great Rapa).² Tahiti and the Paumotus were settled by voyagers from Samoa.

The prevailing winds and currents were not constant but subject to interruptions,—storms and counterwinds and countercurrents. Great voyages were made by the early sailors of Oceania across the direction of the winds and currents,—as when New Zealand was resettled by expeditions from Tonga and Hawaii was populated by

¹ "It used to be doubted whether these people could have gone from the Indian archipelago so far eastward, because the prevailing winds and currents are from the east. But it is now well known that at times there are westerly winds in the region over which they would have to travel, and that there would be no insuperable difficulties in the way of such a voyage." "Polynesia," *Encyc. Brit.*, 11th ed.

² It is also corroborated by the existence on Rapa-iti of stone monuments similar to those on Easter Island.

voyagers from Tahiti who had come over a distance of 2,259 nautical miles.³

From the equator to 5° north,—in places as far as 10° north,—between the north and south equatorial currents,—are the equatorial cloud belt and the equatorial countercurrent originating in the monsoons and flowing eastward from the region of the Carolines. It joins the so-called Mexican current off the Gulf of Panama and at times when the sun is in the Southern Hemisphere or on the equator at the spring equinox, this equatorial countercurrent swings southward down the continental coast as far as Peru and displaces, with its warm water, the northward-flowing cold Humboldt current.⁴

Quatrefages calls the equatorial countercurrent which

³ Quatrefages (*Les Polynésiens*, p. 164) gives interesting circumstances of canoes,—some with living crews, one with only a human skeleton,—being cast on the small island of Tubuai. The Chatham Islands were settled by parties blown upon their shores by contrary winds in a direction opposite to those ordinarily prevailing. Such instances were known to nearly all the European explorers in the Pacific. The Caroline Islanders made regular annual canoe journeys four hundred miles against both wind and current for the purpose of trade. At Tahiti Cook took on board a native named Tubaii,—spoken of as a *savant* (such as was called Amauta by the Incas),—who, in a voyage on Cook's ship of two thousand leagues in different directions in the South Seas could always point out correctly the direction in which Tahiti lay.

Instances of Chinese and Japanese fishing boats which have been blown to sea and which crossed the Pacific with their occupants alive, are familiar in our own day. Kotzebue, in 1816, found on the island of Radek a native of one of the Carolines who had missed his direction by reason of the shifting of the current and had traversed 1,200 miles with two companions in an open canoe.—Quatrefages, *id.*, pp. 102-7.

⁴ This reversal of the currents is due to changes over a considerable period of time of the direction of the winds, which in turn are caused by sporadic changes in the radiation of the sun. Such a phenomenon is accompanied by unusual heat and a rise of from 10° to 18° in the temperature of the sea water, which destroys immense quantities of marine life and revolutionizes meteorological conditions.

Such a change occurred on the Peruvian coast in January to March of 1925. In ten days, from January 18 to 28, the surface temperature of the

crosses the Pacific from the Malay Archipelago to the Bay of Panama, "La grande Route de l'Océanie."⁵ It is at least an interesting circumstance that opposite the very point where the great equatorial current in the Pacific approaches the American shores, at the Isthmus of Panama, Mr. A. H. Verrill has recently discovered the buried remains of a city of stone structures. He found there many stone images which he regards as the oldest remains of Asiatic art yet discovered in America. Among the objects found here of special interest is a small stone image of an elephant. Mr. Verrill states there can be no doubt that this object is intended to represent an elephant as the hind legs of the figure are those of an elephant,—radically different from those of a tapir,—to which animal, or to a parrot's beak, figures of elephants' heads discovered in Central America have been likened by fanciful archæologists. Furthermore, the figure is provided with a typical saddle and trappings of an Indian elephant. From the extent of the forest mold with which these ruins were covered, Mr. Verrill estimates they are possibly 10,000 years old.

The western section of the great Peruvian current sweeps by the southern shores of New Zealand and the Chatham Islands, passes within easy reach of Easter

sea off Talara rose 12° F. (Robert Cushman Murphy, "Oceanic and Climatic Phenomena Along the West Coast of South America During 1925," *Geographical Review*, Vol. XVI, No. 1, January, 1926). Torrential rains fell where there had not been rain for thirty years, and enormous damage was done.

⁵ Speaking of the currents which "flow eastward west of the Sandwich Islands," Quatrefages says: "It is evident that they are sufficient to explain how in our own day disabled Japanese junks, which had lost their reckoning, were carried into this archipelago; likewise how it has been that canoes of black Micronesians have, in advanced epochs, been carried into the same locality."—*Les Polynésiens*, p. 180.

Island, and reaches the South American coast near the southern boundary of Peru, opposite Lake Titicaca. In the north the powerful stream of the Japan current follows the fringe of islands lying off the north Asiatic shore and has no doubt been for immemorial ages a conveyor of peoples over the short northern route from Asia to America. It streams through the Aleutian chain and carries the warmth of the south almost to the arctic.

As the coast of Peru is kept temperate by the cold waters drifting northward in the Peruvian current, Alaska is warmed by the northward drift of this "river in the ocean" from southern Asia, so that the far northern ports of Seward and Cordova are free from ice the year round. Having made the circuit of the North Pacific, this great carrier sweeps southward along the coast of California, Mexico, and Central America to the Gulf of Panama, where it is joined by the eastward-flowing equatorial countercurrent. These great oceanic highways have been, from times far beyond the beginnings of history, important factors in the distribution, by accident or design of the voyagers by sea, of Asiatic peoples on the coasts of North and South America.

IX

THE ANDES AND THE TRANS-HIMALAYAS

"Among his [Marco Polo's] public missions was one which carried him through the provinces of Shansi, Shensi, and Szechuen, and the wild country on the borders of Tibet, to the remote province of Yunnan, called by the Mongols *Karajang*, and into northern Burma (Mien). Marco, during his stay at court, had observed the Khan's delight in hearing of strange countries, of their manners, marvels, and oddities, and had heard his frank expressions of disgust at the stupidity of envoys and commissioners who could tell of nothing but their official business. He took care to store his memory or his note-book with curious facts likely to interest Kublai, which, on his return to court, he related. This south-western journey led him through a country which till about 1860 was almost a *terra incognita* . . .

"In this region there existed and still exists in the deep valleys of the great rivers, and in the alpine regions which border them, a vast ethnological garden, as it were, of tribes of various origin, and in every stage of semi-civilization or barbarism; these afforded many strange products and eccentric traits to entertain Kublai."

Sir Henry Yule and Charles Raymond Beazley, "Marco Polo," *Encyclopædia Britannica*, 11th edition.

THERE is a striking similarity between the Quichuas and Aymará's of the Peruvian and Bolivian Andes,—in dress, color, physique, and mode of life,—and the people living in the high valleys and river gorges of the huge mountain system along the border between Tibet, Nepal, and the Chinese provinces of Yunnan and Szechwan. Photographs of these people of the Asiatic highlands, taken by

recent travelers, might well pass for photographs of the mountaineers about Cuzco and La Paz.¹

It is a curious circumstance that Indian corn, which, with the potato, was the staple food of the Peruvians and is supposed to have originated in America, is the principal food of the Lutzus who live in the remote gorges of the Salwin, and of the Nashi in the cañon of the Mekong, very rarely visited by anyone from the outside world. Like the Peruvians these Asiatic mountaineers drink a great deal of an intoxicating beer made from maize (the Peruvian *chicha*).² The Lolos in Szechwan wear a poncho like the peculiar dress of the Andes.³

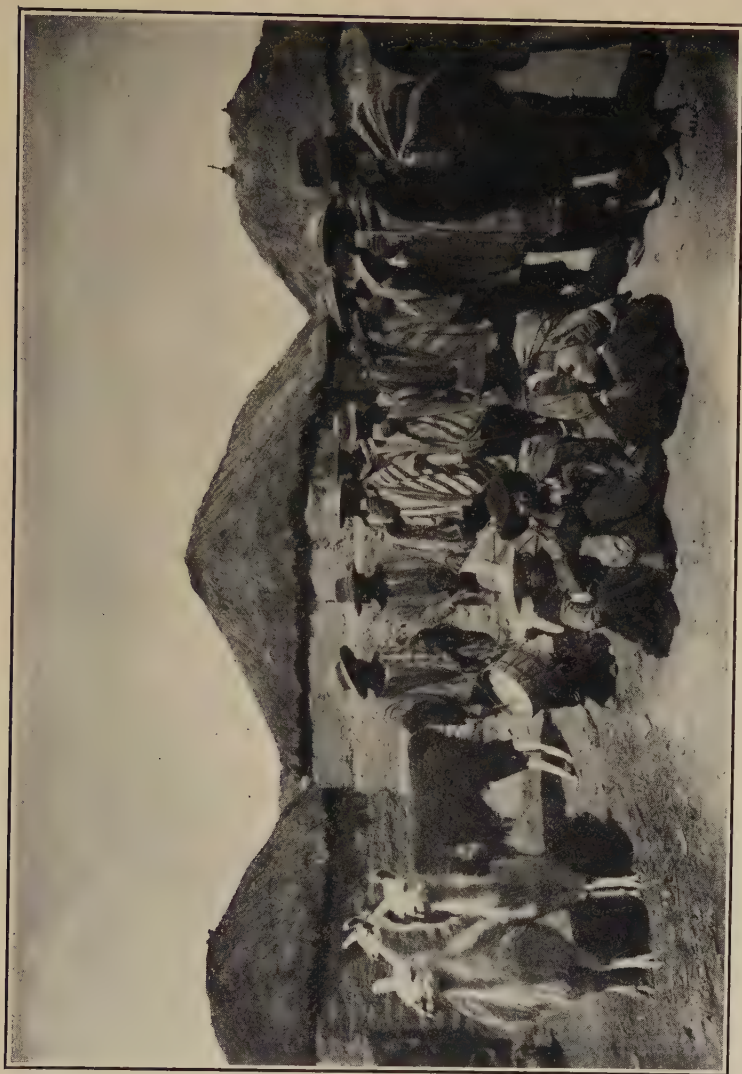
These highlanders of the upper waters of the Yangtse, the Salwin, and the Mekong play a reed flute of the same type and shape as that of the Peruvians.⁴ In many places in these counterparts of the Andes in Asia the principal mode of travel is to be carried on a man's back as in the mountains of Peru. The actual mode of passage over the mountain streams along the borders of China and Tibet is to slide on a rope of withes stretched across the gorge. In some places there are swinging bridges of twisted

¹ See the remarkable series of photographs accompanying a most interesting article, "Through the Great River Trenches of Asia," by Joseph F. Rock in the *National Geographic Magazine* for August, 1926.

² Joseph F. Rock, *supra*, p. 178. As to the hypothetical origin of maize in Asia, see authorities cited in *Encyc. Brit.*, 11th ed., XVII, 448. Tobacco is cultivated and smoked by the uncivilized savages in remote regions of the interior of New Guinea, who have little if any intercourse with the outer world. Its use there is apparently very ancient. E. W. Brandes, Ph.D., "Into Primeval Papua by Seaplane," *National Geographic Magazine*, Sept., 1929, p. 276.

³ Baber, *Journey of Exploration in Western Szechwan*, p. 61.

⁴ Picture in "Banishing the Devil of Disease Among the Nashi," Joseph F. Rock, *National Geographic Magazine*, Nov., 1924.



A HOLIDAY IN JULIACA

Note the reed flutes, the same as used since prehistoric times.

bamboo strips anchored at the ends and constructed in all respects like those erected by the Peruvians over the torrents of the Andes. Roadside shrines of the Tibetan Buddha remind one vividly of the decorated crosses, graves, and altars along the desolate trails of the South American cordilleras.

Before the seventh century A.D. the Tibetans kept their records with knotted cords⁵ in the same manner as the Incas of Peru. Their language belongs to the Tibeto-Burman family of the Turano-Scythian stock, many of whose roots have been recognized in the Quichua and Yunga languages of Peru.⁶

The physical characteristics of the Tibetans are the same as those of the Quichua and Aymará shepherds and farmers of the high Andes. "The males measure about 5 feet 5 inches, except in eastern Tibet where 5 feet 9 inches is a common stature. . . . The eyes are usually of a clear brown, in some cases even hazel. . . . The color of the skin of the Tibetans is a light brown, sometimes so light as to show ruddy cheeks in the children."⁷ This is quite typical of the Peruvian Indians except that the latter, at the present day, are not so tall and are of frailer build.

It is true that the environment of the mountaineers

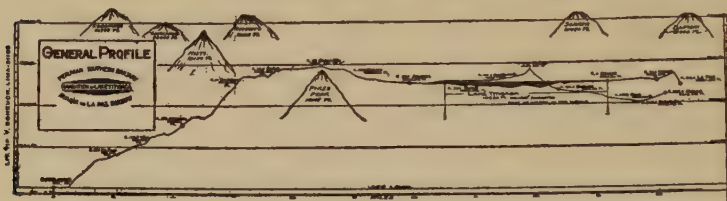
⁵ L. A. Waddell and A. T. de Lacouperie, "Tibet," *Encyc. Brit.*, 11th ed, XXVI, 921. Tally sticks were also used by the Tibetans in keeping accounts. It is curious to note that the accounts of the British Treasury were kept in this manner down to 1826. The old sticks were afterwards used for fuel to warm the houses of Parliament and in 1834 the "houses of parliament were burnt down by the overheating of the stoves through using too many of the tallies."—"Tally," *Encyc. Brit.*, 11th ed.

"The primitive Chinese invented a method of recording events by means of 'knotted cords.'"—Keith Henderson, *Prehistoric Man*, p. 219.

⁶ Instances cited below.

⁷ Waddell and Lacouperie, *supra*.

along the borders of Tibet and China is almost identical with that of the *Serranos* of Peru. Pictures of the Asian landscapes, with their superb panoramas of snow-capped mountains, seamed with profound abysses cut by the rivers, might well be taken for the Andes. The shepherds on the high central plains live much the same life as the llama herders of the Andean pampa and subglacial pastures. The stone houses and irrigated gardens



Profile of elevations of the Southern Railway of Peru and of volcanic snow-peaks of the Andes in Bolivia and Southern Peru in comparison with Pike's Peak, prepared by the Southern Railway of Peru. It is interesting to note the sudden drop from the terminus of the line at Alto to the city of La Paz almost immediately beneath in the cañon of Chuquiapo; also that Crucero Alto, where the road crosses the first summit at 14,666.734 feet is 519 feet higher than the summit of Pike's Peak.

of fruits and vegetables in the deep protected cañons of the Yangtse and the Mekong, with their climate of perpetual spring, remind one of the sacred vale of Yucay and a hundred others walled in by the sheltering white-topped cordilleras of Peru.

Nowhere else is farming carried on at such altitudes as in Peru except in Tibet and along its borders. In Tibet there are large lakes capable of navigation (but not navigated) at an even greater altitude than Titicaca. Barley and some root crops are grown in Tibet at a somewhat higher altitude than in the Andes.⁸

⁸ "We found barley grown in many districts up to 15,000,—it does not always ripen,—and in the valley of the Dzakar-Chu near its junction with

The Tibetans mine gold and copper, as did the Peruvians, and in Tibet, as in Peru, there are extensive areas of gold-bearing gravel in the stream valleys. The ancient trade roads, by which for immemorial ages, by gorge and precipice and over mountain passes, barter has been carried on with distant peoples, are counterparts of the imperial highways of the Andes,—but not so well constructed. The proximity of the frozen pampa of the Andes with the “hot lands” of the lower valleys,—the barren wind-swept highlands, and not far away the luxuriant forests of the montaña,—create conditions almost identical with those of Tibet. The glaciers of the beautiful peak of Miyetzimu⁹ and the snowy range of Kaakerpu match in grandeur and beauty the snow fields of the Royal Cordillera and the glistening peaks of the Vilcanota.

The great cañons of the Salwin, the Mekong, and the Yangtse,—with their patches of hanging villages, terraced farms and little fields stood almost on end on their steep slopes,—are but replicas of the stupendous gorges of the Marañon, the Apurimac, and the Urubamba, sheltering in their mighty walls, as though in a superb house, the ancient Quichua settlements. The work, customs, conditions, and struggle for life of the people are the same in the Tibetan and the Peruvian mountains.

the Arun river is a small area where wheat is grown at an altitude of about 12,800 feet. Peas are grown in the Arun valley near Kharta, where they ripen in September and are pounded into meal for winter food of the cattle as well as of the Tibetans themselves. Mustard is grown in the lower valleys below 14,000 feet.”—A. F. R. Wollaston, *Mount Everest*, pp. 296-7.

⁹ See an exquisite photograph of this beautiful mountain on page 177, *National Geographic Magazine*, August, 1926.

X

TRACKS ACROSS THE PACIFIC

How still the tyranny of ocean sleeps,
With infant innocence its face agleam;
O'er all the ghostly secrets that she keeps
She lies adream, adream.

J. MACMILLAN BROWN, *The Riddle of the Pacific*.

As an example of the mixture of races and languages which went on constantly in America as well as in Asia, the opinion of Kimmich seems quite reasonable: that previous to the arrival of Naimlap, legendary founder of the Chimu dynasty in the valleys of the Moche and Chacáma on the north coast of Peru, there were two distinct languages spoken by the Yungas,—the name given to all the coast Indians,—“one probably Quiché-Maya and the other Mongolic”; and that in the north these were merged under the name of Chimu. In this ancient “melting pot” of races on the Peruvian coast, it is very likely that many more than these two distinct elements went to form the Chimu-Moche composite tongue.¹

¹ “Anyone who is familiar with the number of races from which, for example, the Spanish people was formed, will be prepared to be surprised at nothing as to the number of Peruvian races. For there are many strong traces in the Iberian peninsula of no less than eight races: Basque, Celtic, Greek, Roman, and German,—the four (*sic*) of the Indo-European branch; and for the rest the Phœnician, the Carthaginian and Arabic (Semitic) and the Moorish (semi-Hamitic). But each one of these races had its subraces or tribes; for example, the German is divided into Alanes, Goths, Swabians and Vandals. Like Spain, Peru is a veritable Babel of races, of which the most come,—as it is very easy to prove,—from the Asiatic nursery, that is to say, from the central and eastern part of Asia.” José Kimmich, *Bol. Geog. Soc. de Lima*, 1917, 3rd quarter, p. 351.



Prehistoric Chimu water-jug from Lambayeque, north Peruvian coast, showing features and cap of Mongoloid Mandarin.

Drawing by Joseph Anthony Atchison.

The formation of the passive verb by the suffix *-er*, the imperative by the prefix *en-* or *an-*, the preterit by the suffix *-ta* or *-da*, place-names by the suffix *-an*, is common to the Philippines, the Caroline Islands, and the Peruvian Moche.² Among many similar or identical words³ common to these widely separated lands of the Pacific may be noted:

PHILIPPINES AND CAROLINES	MOCHIC (NORTH PERUVIAN COAST)
pon (ten)	pong (ten)
tabo (basket)	tapa (basket)
	(Sp. <i>tapa</i> , lid, cover)
ai (to be)	ai (to make)
fila (to sing)	fill (to sing)
ket (cuttlefish)	chet (cuttlefish)
amok (forward)	amoch (forward)
moch (mosquito)	moj (louse)
bilú (river)	virú (river). (Note that this is from the same primitive root meaning <i>to go</i> or <i>to run</i> , as the English <i>river</i> .)
ejak (fish)	jak (fish)
chan (sky)	tiang (sky)
chebi (jar)	chape (jar)

Indo-Aryan and also Uigur words are quite numerous in the Mochic, as:

INDO-ARYAN	MOCHIC
jana (low-class people)	yana (low-class people)
ram (moon)	rem (moon)

² Kimmich, *supra*, p. 354.

³ Kimmich, *id.*

INDO-ARYAN

MOCHIC

moch (Dravidian, meaning
hand)

mach (hand)

kalak (a hundred)

palak (a hundred) ⁴

In Uigur *us* is great; in Mochic *uch* means great; in Uigur *kich* means small; in Mochic *kits* also means small. In Indo-Chinese *mang* means rice or wheat; ⁵ in Mochic

⁴ F. W. Christian, *Polyn. Soc. Jour.*, XXII, 226, says: "The language of the Bortok Igorots and other wild mountain tribes of the Philippine Islands, as well as of those of the more civilized valley, plain, and coast dwellers of the group, contains very many words closely akin to the Chimu of the North Peruvian seaboard, the Inca or Keshua Chiefs' language of the districts around Cuzco in Central Peru, and the language of the Aymará of Upper Peru who were evidently descendants of a red race crossed in varying proportions by a dominant conquering people of Hindu-Malay origin. Possibly also there was a backwash into Eastern Polynesia by way of the Galápagos Islands."

He speaks of a "vast number of Inca key words which are evidently Sanskrit," and cites as one instance of their traces left in the migration across the sea, Eastern Polynesian *mai*, *mati*,—hand or foot; *mati-kao*, fingers or toes (literally the *kao* or sprout of the hand or foot) and compares "the Inca dialect (Peru) *maki*, *mati* the hand."

Sidney H. Ray, *Polyn. Soc. Jour.*, XXII, 5, sharply attacks the analogy suggested by Christian and quotes Prof. Sayce as saying: "To compare words of different languages together because they agree in sound is to contravene all the principles of scientific philology; agreement of sound is the best possible proof of their want of connection."

The profound scholar in Polynesian archæology, Edw. Tregear, defends the "brilliant work" of Christian. Characterizing Sayce as "one of the immortals of science," he nevertheless remarks of the statement just quoted from him by Ray: "This quotation, this hackneyed use of a dead word-club that has battered and baffled so many earnest inquirers, is only sometimes true in its first part and is absolutely untrue in its second. . . . Had it been true it is probable there would have been no comparative philology at all, for it was the likeness in sound and sense between a word in one language and a word in another which led the first discoverers to dream of the subject. . . . "Taken as isolated words they would not prove relationship, but when coincidences of thousands of such words occur and grammar adds its overwhelming testimony, to say that such words are not related is simply to run denial to death in a bog of pedantry." "Polynesian Philology," *Polyn Soc. Jour.*, XXIII, 34-35.

⁵ Kimmich, *Bol. Soc. Geog. de Lima*, 1918, 1st quarter, p. 36.

the same word means maize. Originally this root probably signified grain in general. This Indo-Chinese word in the Mochic may indicate not only traces of a common source language but that maize was known to the Chinese and Indo-Chinese before Columbus discovered America. For unknown centuries this grain has been cultivated in the remote upper valleys of the Mekong, where it is the principal food supply today,⁶ and where the climate, people, the terraced farms climbing the steep slopes of the vertiginous gorges, the piles of drying maize, —seem but counterparts of Andean scenes.⁷

Kimmich lists many words common to the Altaic, Semitic, Uigur, Iranian, Hindu, and Tibeto-Burman tongues and the Moche, e.g., the Mochic *shi*, moon; the Burmese *ashi*, moon; the Indo-Gangetic *shi* (cf. English *she*) female of *surya*, sun.⁸

⁶ "Through the Great River Trenches of Asia," by Joseph F. Rock, *National Geographic Magazine*, August, 1926, p. 168.

⁷ Tregear, "Polynesian Origins," *Polyn. Jour.*, XIII, 135, says, "The singular likeness of the word *mais*, originally signifying grain (the Chinese *mai*, rice), and its various forms in Polynesia, to *maize*, or Indian corn (zea mays), would be looked upon as a coincidence too childish to be called a comparison if it was certain that there was no possibility of Oceanic words having reached America; but there are too many arguments to consider on that point merely to pass over the suggestion with a sneer. Whether the word *maize* belongs to Hayti or not (it probably was not of Hayti only) it is certain that the sweet potato, the *kumara* of New Zealand, was known in America as *cumar*."

⁸ Kimmich, *Bol. Soc. Geog. de Lima*, 1917, 3rd quarter, p. 352.

Id., 1918, 1st quarter, pp. 36, 37.

In the Indo-Chinese languages *shi* signifies moon; in Chibcha (Colombia), closely related to the Mochic, *chie* means moon, and Kimmich says that Chibcha is "an Indo-Chinese idiom." He cites also these curious affinities: *Es muy bueno* (Spanish), *Fe jam peñ* (Mochic), *Ihe sem ban* (Tibetan), all meaning, "It is very good." And he says that phonetically the Tibetan and Mochic are "almost the same." He does not seem to notice that the Spanish also might be included in the same phonetic resemblance—*pen*, *ban*, *buen*.

There are also many Quiché-Maya words in this Peruvian coast language.⁹

From the foregoing philological circumstances and many others which he cites, Kimmich deduces that "the primitive Moches must have been in the remotest times neighbors of the Aryans on the west, of the Uigurs on the north, of the Chinese (the source of many of the Philippine and Caroline Island words) on the east; that they had lived in Indo-China,—that is to say first in Tibet (or Szechuan),—and that later on they had descended by way of Burma and Annam to Formosa and the Philippine Islands and thence to Central America by Guatemala, whence they continued,—after a very long residence there,—to Peru and Ecuador."¹⁰

In a general way this line of movement may have taken place in the course of the centuries,—but rather than a continuous identical migration of a single people from one cradle-land it is much more likely that the diverse elements in the Mochic tongue are explained by many different migrations of different races from different directions, which fused their varying speech, drawn from

⁹ Kimmich, *Bol. Soc. Geog. de Lima*, 1917, 3rd quarter, p. 356.

¹⁰ *Ibid.*, p. 357.

"The primitive Naimlapides (Chanes) were an Indo-Chinese tribe, related perhaps to the Shans in Burma or in the Philippines or Formosa,—a tribe which professed the Buddhist religion with its cult of the sun and even more of the moon.

"Its Chief, called Naimlap, had the very significant name 'Son of the Sun' (*ñam* in Tibetan is sun; *lap* is son). . . .

"The Burmese have as their progenitor Sinlap,—that is, 'Son of the Lion,'—a parallel to our Naimlap.

"We will suppose that the Naimlapides probably established themselves first in Guatemala, where they lived a long time. I do not believe that they came in balsas directly from Asia to Peru." Kimmich, *Bol. Soc. Geog. de Lima*, 1918, 1st quarter, p. 69.

many sources, not only by various contacts *en route* but also on the Peruvian coast itself, where it was still further modified by mixture with the great Quichua idiom. The well-preserved traditions tell of many migrations from the north, south, and from the western sea in varying epochs.¹¹

It is not at all necessary that a people live as neighbors to another people in order to acquire a portion of the latter's speech. There are many indirect and secondary means of transmission. Migrations which start from widely separate points often merge in distant parts of the world and leave in a new composite tongue traces of all the older elements. All the great modern languages and peoples of Europe and America are examples of this

¹¹ *Kamote* is the Quichua name of the sweet potato. The Philippine-Malay *kamote* also designates the sweet potato. (F. W. Christian, *Polyn. Soc. Jour.*, XX, 77.) Christian gives *kumara* "as of purely Sanskrit origin,—the original *kumara* of the edible lotus passing through the crucible of the Hindu-Malay of Sunda (north Java), *kumadjang*, *kamal*, into the Polynesian *kumara*, leaving in the Quichua and Aymará dialects of Peru *kumara*,—the choice white potato."

"In several papers published in this journal [*Journal of the Polynesian Society*] it has been suggested that the Polynesians,—great navigators that they were,—reached the coast of South America and that they brought from there the *kumara* root. Some confirmation of this hypothesis is found in an interesting article published in the *Geographical Journal*, Vol. XVIII (December, 1901), p. 576, by Dr. Francisco P. Moreno, entitled 'Notes on the Anthropogeography of Argentina.' He says: 'Undoubtedly there is a connection between South Americans and North Americans, and also with the peoples of Polynesian origin, but the basis of the entire population was the union of the three types mentioned' " (which he previously had described). *Polyn. Soc. Jour.*, XI, 44, editorial note.

Dr. Moreno cites Papuan skulls in the graves of Rio Negro; Maori stone implements at Cuzco, Peru; Marquesan carved wood clubs from the ruins of Trujillo and elsewhere in Peru, and from Quillota, Chile (now in the museum of La Plata); and others in Colombia and Ecuador; a Maori stone club at Santiago del Estero, Argentina; Polynesian anthropological elements mixed with the Patagonian; Polynesian culture amongst the Chalchaqui and old Peruvian cultures.

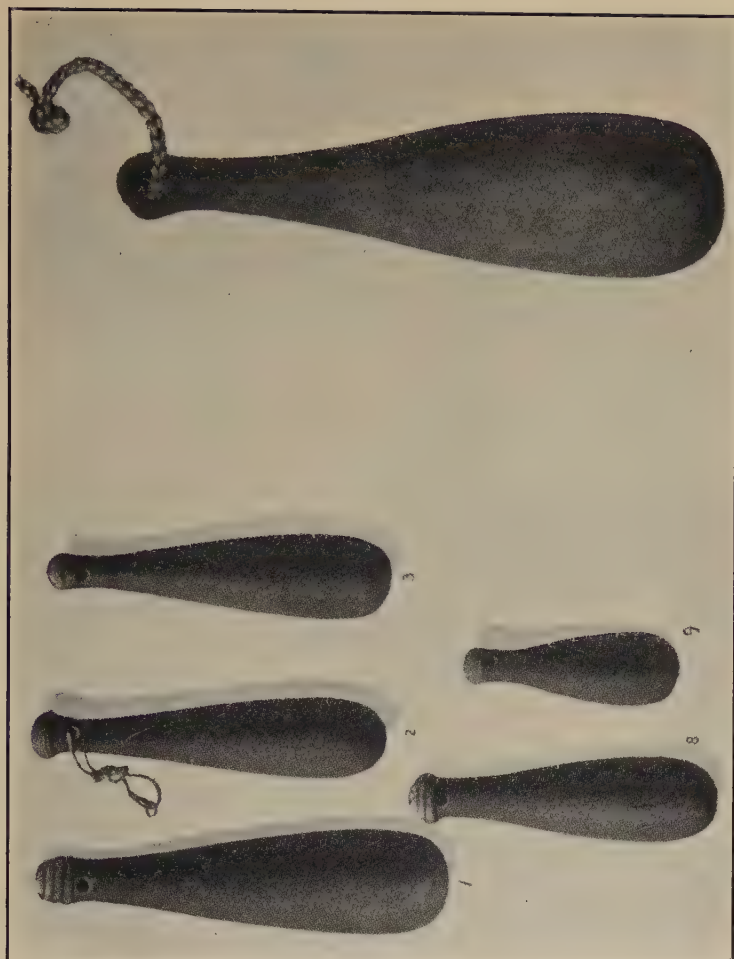
process. Nearly all of the older tongues and races of Asia and America were formed in the same way; and the most of them contain elements in common which were drawn from a common source entirely remote from either.

Both the Spanish and the English brought Aryan words and the Aryan stock to America from Europe, and both found there before them in North and South America Aryan words, and people of mixed Aryan descent, derived from earlier and repeated migrations from the opposite direction by the Pacific, but from the same ancient Asiatic source.¹² Primitive Aryan words and people no doubt came to America in the way cited by Kimmich in archaic times before the Indo-Iranian separation and dispersion north and south of the Hindu Kush. But they no doubt also came by other routes and from other fountainheads at later times,—especially from Indo-Arya by the island chain of Polynesia.¹³

¹² "I have found but a small percentage of Quichua words or roots the same as in Polynesian while the range of sounds in Japanese is nearly the same as in Polynesian." J. Macmillan Brown, "Languages of the Pacific," *Bishop Museum Occasional Papers*, VII (1918), p. 18.

"The only two languages in the Pacific Ocean that have the same phonologic laws [as the Polynesian] are the Japanese, away to the northwest, and Quichua, away to the southeast; but the former is grammatically of a different type, the agglutinative, and the latter, though almost grammarless, like Polynesian, has inflections only in the pronouns, including the strange Polynesian characteristic of a different form in the first person for the plural that includes those spoken to, and the plural that excludes those spoken to," J. Macmillan Brown, *ibid.*, p. 18.

¹³ "I believe that they arrived in boats like the junks which the Chinese people had in that epoch, and also the catamarans of the Malaysians which carried as much as one hundred tons. The Malaysians and their relatives, the Polynesians [the better opinion is that the Malays were not related to the Polynesians—M. P.], crossed in these boats the entire Pacific, populating it little by little, arriving in the fifth century A.D. in the Marquesas Islands and Hawaii, whence it is no more than thirty days' journey in those sailing boats to Peru. From the Marquesas to Lima, which two are almost on the same parallel of latitude, is a distance of some thousand



"Maori stone meres, war clubs with cutting edges."

"A mere found in a grave of Ecuador early last century."

From the "Riddle of the Pacific" by J. Macmillan Brown. Photographic copy through the courtesy of Dr. William J. Showalter of the National Geographic Society.



A bowl from Nasca showing Chinese or Japanese features.

*From "Un Huaco con Caracteres Chinos," by Pablo Patron.
Bol. Soc. Geog. de Lima, Año XVII, Tom. XXIII, Trim. Terc.,
p. 241.*

leagues, the same from Hawaii to Guatemala, which latter two likewise are approximately on the same parallel. From the Philippines to the Marquesas and Hawaii the Pacific abounds in neighboring islands and islets, and it was no great achievement to make these journeys in that way. . . .

"That Central America, Mexico, and especially Guatemala were countries that were very well known to the Chinese many centuries before,—I will not say Christopher Columbus, but before the Norseman, Leif Ericson (Ericsson),—is absolutely certain (although it may not be true that the Chinese had denominated this new island Fusang) because the many huacos with Chinese inscriptions found in America in excavations amply prove it. When during the Russo-Japanese War the Russians entered Mukden, the capital of Manchuria, they discovered in the archives of the city many documents which clearly related that Central America was as well known to the Chinese many centuries before the arrival of Ericson (Ericsson) in Vinland and Markland as Europe is known to the modern Americans, and that they (the Chinese) knew perfectly well the distance between the ports of China and those of Central America expressed in *lis*." Kimmich, *Bol. Soc. Geog. de Lima*, 1917, 4th quarter, pp. 460-461.

In a note at this place Kimmich says, "Vining Eduard wrote a book, *An Inglorious Columbus*, proving that the Chinese traveler Huei Sen had already discovered America in 499 of our era, that is to say, a thousand years before Columbus. This is also the Zapotec tradition. . . . It should also be recalled that the Chinese had knowledge of the compass a thousand years before the Europeans and used it in their great ships at least from the fourth century of our era."

Ibn Batuta (Abu-Abdullah-Mahomed; born in Tangier, February 24, 1304), in *Travels in Bengal and China* (Hakluyt Society), p. 25, says that the larger Chinese junks each carried six hundred sailors, four hundred soldiers, had four decks, numerous private and public cabins. They were propelled by sails and oars.

After nineteen years' residence at the Court of Kublai Khan, Marco Polo and his uncles were permitted to return to Venice. They joined an embassy from the Moghul Tartar Prince of Persia, Arjhun, which was returning to Persia with the young Princess Cocacin (Kukachin) selected by the Grand Khan, in response to the request of Arjhun, as the latter's bride. Kublai Khan fitted out the expedition with fourteen ships, *each of four masts*, some of them with crews of 250 men each. They sailed from Zaiton (probably Chang Chow, English *Chinchu*, Peruvian *Chincha*, *Chinchay*) in the beginning of 1292.

Travels of Marco Polo, ed. William Marsden (London, 1818), pp. xi-xiii.

The Chinese visited America as early as the fifth century A.D. The Chinese name for America was Fusang. The Japanese in their ancient encyclopædia gave it the same name and described it as a country 7000 miles east. Prof. Edw. Fontaine, *How the World Was Peopled*, p. 245 *et seq.*

XI

A NASCA VASE WITH CHINESE CHARACTERS

A NASCA bowl (from the southern coast of Peru) is decorated with a face with the characteristic slant eyes of portions of the Mongolian race, and surmounted by a fillet, or headdress, worked out in a regular design of conventional serpentine forms typical of Asiatic-American antique art.¹

Likewise from Nasca is a vase "of very fine clay, delicately glazed in different colors, representing primitive Nasca civilization." In a broad border of pale blue around the top of the pot the figure of a god is repeated a number of times, with varying combinations of colors in which red predominates. The figure is conventionalized, grasping in each vaguely formed hand the scepter of authority.

Conventional forms of the divine emblem of the serpent issue from the god's sides and headgear. Underneath each apparition of the god appears the same primitive Chinese character,—天,—"tien, which signifies the sky." The figure blazed in the blue field of the sky evidently represents the solar god of the primitive Nasca people.²

¹ "Un Huaco con Caracteres Chinos," by Pablo Patrón, *Bol. Soc. Geog. de Lima*, 1908, 3rd quarter, p. 250. This bowl was presented to the Geographic Society of Lima by the Señora de Fracchia, of the Hacienda Las Trancas.

² Pablo Patrón, *supra*, pp. 247-8. This vase is also from the Hacienda Las Trancas, and is in the collection of the Geographic Society of Lima.



XII

WHITE CHINESE AT CHAN-CHAN (NORTH PERU)

"It is well known that for a long period after the close of the thirteenth century, when an account of the travels of Marco Polo of Venice first made its appearance and was circulated in manuscript, the information it gave of countries till that time unheard of and manners incompatible with every idea that had been entertained of the barbarians of Tartary, was treated with levity or ridicule by the generality of his countrymen and read with suspicion by the best instructed persons in every part of Europe. It was thought by them a paradox that whilst the Western World was overrun and desolated by tribes whom animosity and terror painted as still more savage than they actually were, other tribes of the same nomadic race and professing submission to one common head should be found not only to live under a regular government, but to have become the constituent part of a splendid and highly civilized empire filled with magnificent cities, abounding in rich manufactures and the scene of a commerce of such magnitude as rendered that of Venice trifling by comparison."—WILLIAM MARSDEN, Introduction to *Travels of Marco Polo*.

JOSÉ KIMMICH¹ expresses the opinion that the Lolos, who occupied the territory now composing the Chinese provinces of Szechwan and Yunnan on the borders of Tibet and were conquered by the Chinese in the tenth century A.D., reached Peru in small numbers. He bases this opinion on a specimen of Lolo written characters on an huaco, or earthen pot, discovered at Chan-Chan on the north Peruvian coast.

It is interesting to observe in this connection the close

¹ *Bol. Soc. Geog. de Lima*, XXXIII (1917), 3rd quarter, p. 347.

similarity today between the Lolos and the Andean Peruvians,—their appearance, crops, mode of life,—and this is made more striking by the similarity of the two countries: the deep, mountain valleys of the two lands, the terraced farms which lie along the slopes of the river gorges, the crops of maize, the woven swinging bridges over the rushing mountain streams.

Kimmich calls attention to the division of the Lolos into blacks and whites,² the latter the ruling class. This was but the universal struggle of the advancing, conquering Aryans with the dark indigenous people with whom they came in contact in their migrations. The black, white, red, and yellow colors of the Chinese flag represent very well the composition of the race,—the mixture from ages of commerce and war, of settlement superimposed on settlement.

In China there was a relatively larger element of white than in India, and, as in India, the white stock was better preserved in the highest social circles,—still remaining today in some of them almost pure. China, however, was a more democratic country, less enslaved by caste, and there was more general mixture of white blood.

If the Lolos reached the Peruvian coast it is not strange that there are found there but few remains of their culture. It is more likely that they soon sought the cool highlands of the Andes so similar to those from which they or their ancestors had come about the upper courses

² Marco Polo says of the inhabitants of Kinsai, China: "The men as well as the women have fair complexions."—*Travels*, Marsden's ed. (London, 1818), p. 523.

Marsden, in a note, *ibid.*, p. 523, quotes Arabian travelers of the ninth century as saying the Chinese were "of good height and white."

of the Yangtse, the Mekong, and the Salwin, and this may account for the prehistoric remains of tall men with red hair found in the burial vaults of the stupendous temple-tomb of Cuelap on the precipices of the Utcubamba beyond the Marañon. Even today among the Indians of the northern cordilleras of the Peru, with no mixture of European blood, there are some of quite light complexion.

Kimmich states that there are many Aryan words in the Mochic language and that some of the Chimu pottery depicted people of white complexion and "Caucasian features."³ He suggests their descent from the white tribes of southeastern Asia,⁴—and that the Chimus, like the Tongutos of Kansu, contained both white- and dark-skinned tribes. From the former he says "came those people of almost white complexion near Cajamarca and further inland about Chachapoyas."

Kimmich calls attention to the resemblance of the people of Ca-chin, Chi-mu, Li-mu in Asia, to the Peruvian Chimus of Caucasian features and light complexion,⁵ represented on the Chimu pottery, and adds: "We find the same even today in many Indo-China tribes in Tibet and Burma and above all in Annam and Korea. In Lima I have seen some Japanese of very similar type of almost white complexion and without the concave noses of other races of Japan itself. These Japanese (of light com-

³ *Bol. Soc. Geog. de Lima, supra.*

⁴ The cradle of the Polynesian languages was southeastern Asia. The Polynesians were derived from "the same family as the Chinese,"—and were connected with the Tibetan and Siamese. Alfred Maury in Nott and Gliddon's *Indigenous Races*.

⁵ Isaac Taylor, *Origin of the Aryans*, p. 20: "We are told by Chinese historians of certain mysterious tribes in Central Asia who were of tall stature and had green eyes and red hair."

plexion) are descendants of the people of Mu, Lu, and Ka, who in various detachments had emigrated from Indo-China to Korea and Japan. Some believe that a great part of the Indo-Chinese were no more than offshoots of the Marathas of the Deccan, which, being semi-Aryan or Aryan mixed with Dravidian,—very warlike, tall, and muscular,—had invaded Burma and Tibet and thence, little by little amalgamating with the Chinese, had reached as far as Annam and Tonkin.”⁶

It is interesting to note, as illustrating the complexity of the tangled skeins of racial movements on the Pacific, that the dark-skinned Dravidians who were driven out of parts of India by the white Aryans, put to sea to escape the invaders and settled parts of Malaysia and Polynesia, and were overtaken in their island migrations by the same white race before whom they had fled,⁷ and the two races mixed again as far eastward as Easter Island⁸ and Peru.

Such terror as that which impelled the erection of such stupendous works as Sacsahuaman and Machu Picchu

⁶ *Bol. Soc. Geog. de Lima, supra*, p. 349.

⁷ Fornander cites A. H. Keane, *On the Relations of the Indo-Chinese and Inter-Oceanic Races and Languages*, as saying that the Polynesians are descended from a “fair, a Caucasian, an Indo-European race,” and says “the Polynesian language is fundamentally Aryan, of a pre-Vedic type, before the inflections were fully developed or generally adopted.” *Polynesian Race*, Vol. II. Widney puts the cradle-land of the Proto-Aryans on the temperate table-land of central Asia. *Aryan Peoples*, pp. 19, 22.

S. Percy Smith says (*Polyn. Soc. Jour.*, XI) that every branch of the Polynesian race has a mixture of Melanesian.

The present Polynesian is the result of the amalgamation of dark Melanesians with the fair ancestors of the Polynesians. “These warlike, stalwart, capable, dignified Polynesian navigators and poets, with their love of a joke withal, have no connection with the morose Malay.” S. Percy Smith, “Hawaiki—the Whence of the Maori,” *Polyn. Soc. Jour.*, VIII, 46, citing the “Malayo-Polynesian Theory,” by Dr. John Fraser, *Polyn. Soc. Jour.*, VII, 13.

⁸ Mrs. Scoresby Routledge, *The Mystery of Easter Island*.



An idol or *huaco* from the north coast of Peru. It represents the Sun God seated upon a turtle and a serpent. Cf. Hindu myth, *infra*, p. 289. The characters on the tablets are said to be of an archaic Chinese script and to refer to a field and a spring. In the Polynesian myth the God Tane was summoned by Io, the Supreme Creator, to receive from him the "three branches of knowledge on the two sacred stones." *Infra*, p. 273.

From "Un Huaco con Caracteres Chinos," by Pablo Patron. This was also described by José Kimmich, "Origen de Los Chimus," *Bol. Geog. Soc. de Lima*, 1917.

might well have driven men to the great migrations which they evidently made across the seas. But it was not always fear but the lure of land and adventure,—the constant beckoning of the mysterious and beautiful horizon,—which brought them to the sunrise.

In Chan-Chan, the great capital of the Chimus, as in India, the turtle and the serpent were sacred,—and the moon was the harvest goddess. The Chimus, like the Indo-Aryans, maintained the phallic cult of Siva and worshipped the linga, emblem of the male generative power.⁹

It is an interesting circumstance that these emblems, carved in stone in conventionalized form,—similar to those before which thousands of devout Hindus prostrate themselves in the village temples of India,—stand in several places at the intersections of busy streets in Lima today as mere corner guards, neither the officials who placed them there nor the thousands who daily pass by them having the slightest idea of their origin or significance. This shows how a technical form in religion or art, as well as in language, may survive long after the conception and motive of its origin have been forgotten. The Peruvians as well as other races of the western world still follow the phallic cult, but they do not worship its emblems in stone.

“Well, then! Where did those Chimus, Indo-Chinese, originally live? According to genuine words which are more representative of their idiom, such as *pong*, *ñite*, *brañ*, *chan*, *hong*, and others, all of which they use in their speech today, even in the Tibeto-Burmese territory, they must have lived in the provinces of Tsang, Bhutan, Assam,

⁹ Kimmich, *supra*, p. 349.

or of Upper Burma, Siam, or Annam. Even today their descendants live there,—the people Chin, Lu, Ka, etc. All those people are subdivided into the Szi-cachin, Li-cachin, Szi-mu, Shu-mu. The latter, the Shu-mu, still live today in Szechwan and the Li-mu in the island of Hinan near Canton. All of those people contained thousands of subtribes called Bod-pa, Kham-pa, Sok-pa, Tok-pa, etc., all terminating in *-pa*, which in Tibeto-Burmese means place.”¹⁰

This Peruvian author is of the opinion that *kon*, one of the most ancient deities of the Peruvian Yungas, is the *Uigur-Turco Kon*, sun; that the word is of the same root and origin as the Japanese *kon*, lord, and that “it probably signified ‘sun, the destroyer,’ the same as the Tibetan *bon*.”¹¹

¹⁰ Kimmich, *supra*, p. 348.

¹¹ Cieza de Leon says that the Indians of the region of Chachapoyas “were whiter than the other Indians,—their women very handsome.” He makes the significant statement that they wore the “*llantu*” (no doubt a misprint for *llautu*) on their heads as a distinctive emblem of their tribe. This was evidently a mark of caste like the royal *llautu* of the Incas. *La Crónica del Perú* (Madrid, 1922), p. 259. It resembled a Hindu turban. Prescott, *Conquest*, etc. (A. L. Burt, N. Y.) I, 328.

Kimmich states that he examined many Mochic babies and that most of them had black spots on their buttocks, a characteristic sign of the Indo-Chino and Mongol peoples in general. This mark is supposed to indicate a trace of negro blood, and if Dr. Kimmich is right, the characteristic he mentions may have been the result of a black strain in the mixed races known as Mongols and Indo-Chinese, inherited by the Moches.

“All (the culture of the Toltecs, the monuments of Cuzco, etc.) seem to point towards eastern Asia,—towards people who have been in contact with the Tibetans, the Shamanist Tartars, the bearded Ainos of the Islands of Jesso and Sathalin.”

Alexander von Humboldt, *Vues des Cordillères* (Paris, 1816), Vol I, P. 39.

XIII

ASIATIC ART IN PRE-COLUMBIAN AMERICA

"Under the passage to the church of San Lorenzo, which stands on one of the islets named Gemelle, lies buried Marco Polo, surnamed *Milione*, who wrote the account of *Travels in the New World* and was the first before Columbus to discover new countries."—Sansovino, *Venetia Descritta*, 1663 ed., p. 80.

Like America, Cathay was *New* to the Venetians only because it was unknown to them.

AMONG the ruins of the prehistoric Mayan city of Copán in Honduras, on a large monolith in one of the long-abandoned courtyards appear carved in high relief two elephant heads with typical trappings of Indian elephants. Characteristic Hindu or Cambodian mahouts wearing typical Hindu or Indo-Chinese turbans are mounted upon them.

On the same column (designated by the archæologists as Stela B) among many ornate figures and decorations ¹

¹ In studying the excellent drawings of Alfred P. Maudslay ("Biologia Centrali-Americana," *Archæology*, 1889-1902) of Mayan sculptures as reproduced in Smith's able work (*Elephants and Ethnologists*, especially plates 29 to 51, pp. 76-129) one is struck with the remarkable strength and freedom of conception and skill of execution of the Mayan sculptors. It is quite interesting to note that our "ultramodern futurists" and "cubists" are not so modern after all, but rather are going back to what has been considered the semi-barbaric style of the Mayas. These ancient Central Americans may have been the true "futurists."

The world moves on a curve which in everything tends to come back to the starting point. Much of our civilization that is rated as new and modern is but a return to ancient primitive conditions. Extremes, by the very vice which they contain, tend to destroy themselves. So we may

are two other seated figures, one of them with typical Indo-Chinese turban and facial features. Encircling the men's waists are Indian cobras de capello,—holding their heads erect in front of the figures, in much the same manner as may be seen today among the snake-charmers of India. A great central human figure on this richly decorated monolithic column has a distinctly Cambodian face with Indo-Chinese turban and drooping mandarin mustaches. In its general richness of ornamentation, as well as in its delicate detail, the entire sculpture vividly reminds one of the temple decorations in southeast Asia.²

This carving was done at Copán probably 900 or more years before the arrival of Columbus in America; and, as elephants were unknown in America, a more or less conventional design was evidently brought, like many

always hope for the correction of abuses by the operation of the natural laws of evolution; although it is a cruel process,—operating by wholesale destruction of individuals, races, and cultures.

So it is that Bolshevism, with its modern doctrine of communism, is but a return to primitive tribal customs which existed before the institution of individual property rights laid the foundation of civilized society. Likewise in art: the ultramoderns are only returning to the conventional style of the early Mayas, Mexicans, Peruvians (as shown in their pottery), Hindus, Chinese, and Japanese. And in woman's dress: the so-called latest fashions are not really new, but proceed backward,—by the same stages over which we have come,—to the simple nudity of earlier days.

There is by no means such a gulf as is commonly supposed between our culture and that of our early kinsmen. These "modern" fads had all been tried and many of them discarded by the ancestors of the Incas.

² In a picture of Mayan sculpture (*Current History*, February, 1927, p. 629) a god is represented standing on the back of an elephant, like *Indra*, of India. In the same picture the central figure is the same as a detail of the monolithic gate at Tiahuanaco.

It is a very curious circumstance that the strange elongated head and face which appears in the great stone figures on Easter Island (*The Riddle of the Pacific*, J. Macmillan Brown, Frontispiece) also appears in almost exact duplication of detail in "Egypt," Plate I—Earliest Egyptian Art, Figs. 2, 3—Heads on Ivory Tusks, *Encyc. Brit.*, 11th ed., IX, 64.



THE TOP OF STELA B AT COPAN

(After Maudslay)

From "Elephants and Ethnologists," by G. Elliot Smith.

Dr. Smith says (page 4): "The design upon the ancient American stela B at Copan, the discussion of which is the subject of this book. The claim put forward is that it is the picture of an Indian elephant with its turbaned *mahout*, modeled by a sculptor who had never seen the animal but was copying an imported design. The drawing is copied from Maudslay, who regards the animal as a tapir." Note the *Cobras de Capello*, snakes peculiar to Asia, coiled about the figures seated at the feet of the elephants.

other features of Mayan art and religion, from Asia by way of the Pacific.³

In the Mayan and Mexican codices and hieroglyphic reliefs there are representations of the elephant-headed god of rain called *Chac* by the Mayas and *Tlaloc* in central Mexico.⁴ Dr. Smith discusses very interestingly the resemblances of this god to *Indra*, the most important of all the Indian gods, next to the supreme *Trimurti* or Trinity. The elephant was the totem of *Indra*, while the Indian god "most commonly represented in the form of an

³ Elaborate proof of this, with many plates of both American and Indian sculptures, is set out very conclusively and cogently by G. E. Smith, *Elephants and Ethnologists*, London, 1924.

⁴ Smith, E. & E., p. 51 *et seq.*, cuts facing pp. 46, 48.

In an interesting article in *World's Work* of August, 1926, giving an outline of an expedition conducted by himself and Dr. Herbert J. Spinden for the study of Maya ruins in Yucatan, Mr. Gregory Mason speaks rather disparagingly of "travelers who took the grotesque noses of the common 'mask panels' of Maya façades to be elephant trunks."

The able author of *Elephants and Ethnologists* cites many writers on the subject who have recognized the Mayan sculptures as representations of elephants or mastodons. Some of the authorities quoted by Professor Smith as supporting this view are of great weight, such as the anthropologist, E. B. Tylor, in his *Researches into the Early History of Mankind*, 1865. Mr. Mason himself says "the Mayas can be assigned virtual 'beginnings' in the Western Hemisphere." This by no means excludes various influences from Asia at different periods of the development of Mayan culture,—just as every other great civilization of which we have knowledge, however original may be the form it has taken, has been influenced by contact, either direct or indirect, with other cultures.

Mr. Mason speaks of "a great trade-route which existed on the east coast of Central America some 800 years before the Yankee clipper ships. . . . Partly by land and partly by water, turquoise reached Yucatan from what is now New Mexico. Manned by twenty-five or thirty paddlers, the great Maya canoes took textiles, pottery, and other home manufactures to Colombia and brought home emeralds and pearls." But he does not seem to consider it as possible that the very much abler Asiatic-Polynesian navigators in their larger double boats, often carrying two hundred and sometimes even three hundred people on the milder waters of the Pacific, could have reached the shores of America. Though the great Polynesian sailors discovered and peopled the minute islands of Oceania, mere specks in the sea,—often separated by more than two thousand miles,—this writer refuses to consider the possibility that they could have carried the culture

elephant" was Ganesa, . . . and "some element of confusion must have been introduced during or before the transit across the Pacific."⁵

The conception or myth of the dwarf god was common to India, Egypt, and America, and probably had its origin in the parent Aryan tribes of central Asia,—whence it spread south, east, and west. Just as the Aryans introduced the horse into Babylonia and Egypt,⁶ they or their

of the East to the two great continents which spread their shores for seven thousand miles across the ancient mariners' way.

Such commerce and intercourse as that which Mr. Mason describes was not confined to the Mayas but was quite common in the ancient world. In the seventh century A.D. the "Chinese Empire" extended to the Persian Gulf. There was a flow of trade which reached to Egypt in the west and the Pacific coast of China in the east thousands of years before the Christian era.

In support of his doctrine of the autochthonous development of races and cultures, Mr. Mason argues: "Two peoples, occupying widely separated portions of the globe, under similar conditions of living will be likely to develop similar institutions. If the climate is hot and there is straw, straw hats are apt to be devised by both nations." It is not likely that either would make straw hats, but, even if it should so happen, it is not probable that each would independently develop the same style of weaving, the same shape, and the same identical designs and figures of ornamentation of the hats.

⁵ Smith, *id.*, pp. 55-56. It is not necessary to suppose that the crossing of the Pacific was responsible for an element of confusion, as nothing could be more confused than the multitudinous versions of these ancient myths in Asia itself.

⁶ "That the Iranians must have come from the East to their later home is sufficiently proved by their close relationship to the Indians, in conjunction with whom they had previously formed a single people, bearing the name *Arya*. Their residence must have lain chiefly in the great steppe which stretches north of the Black Sea and the Caspian, through South Russia, to Turan (Turkestan) and the Oxus and Jaxartes. . . .

"Certain of their princes,—at first probably in the rôle of mercenary leaders,—reached Mesopotamia and Syria and there founded principalities of their own. . . .

"With this we may very probably connect the well-known fact that it was about this very period (1700 B.C. approximately) that the horse made its appearance in Babylonia, Egypt, and Greece."—Eduard Meyer, "Persia, Ancient History," *Encyc. Brit.*, 11th ed., XXI, pp. 202-3. See also Roland B. Dixon, *Racial History of Man*, pp. 245-6.

ancestors carried thither their great solar myths with much of their language and culture. The Vedic conception of Vishnu, the sun-god, in one of his earliest avatars, was as a dwarf "who claims as much ground as he can cover by three steps, and then gains the whole universe by his three mighty strides."⁷ The same conception was evident in the Egyptian worship of the "misshapen dwarf Bes," and of the Memphian Ptah always depicted as a mummy or as a dwarf.⁸

One of the striking objects discovered by A. H. Verrill in his excavations at Coclé in Panama,—along with the elephant,—is the stone idol or image of the dwarf hunchback god so frequently found among the burial *huacas* of Colombia and Peru. This myth probably originated in the active and adventurous life of the Paleo-Aryans in the gradual deification or apotheosis of some ancient priest or chieftain who, though a dwarf, had rendered some notable service to his people, or who, by his physical strength, his wisdom or courage, or by the shrewd use of magic, had impressed himself on their imaginations.⁹

⁷ H. J. Eggeling, "Hinduism," *Encyc. Brit.*, 11th ed.

⁸ A. H. Gardiner, "Egypt, Ancient Religion," *Encyc. Brit.*, 11th ed.

⁹ A very graphic figure of this hunchback god from Tzin-Tzun-Tzan, state of Michoacan, Mexico, Tarascan culture (note again the distinctive Aryan terminal *-an* of the place-names)—standing on a fish, evidently his *makara*, or carrier, indicating his arrival by sea—is Fig. 3 of Plate II in the remarkable series of plates of pre-Columbian art, opposite p. 816, Vol. I, *Encyc. Brit.*, 11th ed. ("America, Archaeology").

Just above this (Fig. 1) from the same place (Tzin-Tzun-Tzan) is "Casey at the Bat," or a figure immensely like that noted character.

On the same page is an excellent view of the ruins of the pyramid-temple of Papantla near Vera Cruz, Mexico, which, with its mounting series of up-curving roof-points, inevitably reminds one of the Asiatic pagoda type of architecture. The idea of the pagoda itself no doubt was originally suggested, like that of the Gothic cathedral, by a tree,—the pagoda from the even stories of the regular, bowled sets of branches of a spruce,—the cathedral by a grove of oaks or elms. Especially, the distinctive birds and trees of Japan have characterized Japanese art.

XIV

THE HINDU "WONDER-BEAST" IN MEXICO AND PERU

"ONE of the most distinctive creations of civilization is the composite wonder-beast, of which the dragon is the best-known variety. The forms it assumes in graphic art are as protean as its adventures in myth; but both the anatomical features and the mythical experiences of the dragon in the Old World are so peculiarly devised that there is no doubt as to the common ancestry of all dragons, even if we recognize that in each region where they occur the wonder-beast has his distinctive traits of character. Thus the study of the American dragon affords evidence of very precise significance as to the sources of the civilization of the New World."¹

The *makara*,—described as the fabulous "wonder-beast" of Asiatic myths,—was "one of the most frequently occurring decorative forms upon medieval Hindu temples,"² and took various forms. It was represented as a dragon, an elephant-fish, a crocodile-snake, and in various monstrous combinations, such as "a four-footed beast with a fish's tail, a crocodile's head and snout, loose flapping ears, and the body in some cases partly covered with scales."³

¹ Smith, *E. & E.*, p. 66.

² Henry Cousens, *Annual Report for 1903-4 of the Archæological Survey of India*.

³ "The word *makara* ('magar' or mugger) usually signifies an alligator or crocodile, but the *makara* as represented does not suggest either of these animals." Cousens, *supra*.

In various related forms the *makara* appears in Asia and America. In its mythical nature it is the carrier of a god, and in India, Cambodia, Mexico, Central America and Peru the god appears either emerging from the mouth of this monster, mounted upon its back, or as in the tiger-fish *makara* of Nasca (west coast of Peru), where the god-



"Indian Makara from a cave at Aiholi, in the form of the so-called 'crocodile' with fish scales, an elephant's trunk and tusks, and a human figure emerging from the mouth (c. 6th Century A.D.). Note especially the floral decoration above the head and body, the pattern around the eye, and the spiral ornaments below the jaw and near the shoulder. Note also the highly ornate spiral form of the caudal end of the body."

From Smith, "Elephants and Ethnologists."

dess of fecundity appears joined as a part of the body of the wonder-beast. In some cases the *makara* itself becomes the god—carrying the symbols of the god's nature.

The Emperor Fu-hi, whom the Chinese look upon as their first historic ruler, is supposed to have lived from 2852 to 2738 B.C. He is sometimes pictured as a supernatural being with a fish's tail and a human body. He is said to have "replaced a kind of knot-writing [compare Peruvian quipus] previously in use by a system of hiero-

glyphics"⁴ and "established social order among his people, who, before him, had lived like animals in the wilds,"—as Viracocha had redeemed the Peruvians.⁵ Smith describes



"Maya pot, shaped in the form of a Crocodile-Makara, with the spots and antlers of a deer. (Liverpool Free Public Museums.)"

From Smith, "*Elephants and Ethnologists.*"

⁴ Frederick Hirth, "China: Chinese Origins," *Encyc. Brit.*, 11th ed.

⁵ On p. 21, Vol. II, *Travels in Yucatan*, by John L. Stephens, there is an excellent engraving of the remarkable ruins of Zayi or Salli. In the ornamental frieze above the columns of the temple door appears an excellent example of a Mayan *makara*, with the typical conventionalized features of many of the Indian *makaras* as pictured in the work of G. E. Smith. On p. 56 of the same volume of Stephens, in an engraving of the ruins of Labnah, the elaborate cornice is in the form of a remarkable serpent-*makara*, culminating in one corner of the temple in the wide-open mouth of the monster, in which the god appears as a human head emerging from the flaring jaws.

Smith makes an interesting comparison of this widely diffused myth with the various oriental versions of the story of Jonah and the whale. "Nowhere is the derivation of American culture from Asia more obtrusively displayed than in the representation of men or gods emerging from the gaping mouth of some mythical monster analogous to the *naga* or *makara* of the Old World. . . . Prof. de Visser, who insists upon the identification of the Chinese and Japanese dragon with the Indian *naga* or serpent, emphasized the fact that the representation of a human head emerging from a dragon's jaws is an Indian motive, which was transferred

the evolution of this fabulous creature and prints⁶ its earliest Babylonian form as the antelope-fish; and its earliest Indian modifications, in which the elephant and the crocodile-fish soon appear.

Dr. Smith suggests the origin of the myth in the arrival in the Persian Gulf of a ship from Egypt bringing evidences of Egyptian culture. To the natives, who had never seen one, a ship was a strange sea-monster,—much as the ships of Columbus seemed to the Caribs. The commander, bringing them a superior civilization, came to be regarded,—like other commanders under similar circumstances in various parts of the world,—as a god who was brought to mankind by the vehicle of this wonder-beast.

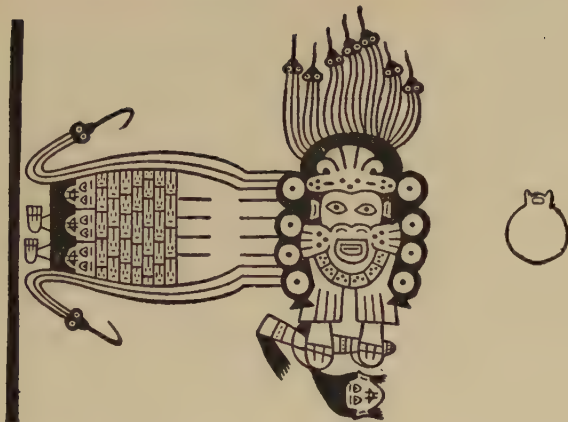
As Viracocha was said to have been a white man who came out of Lake Titicaca, *Ea*, the culture hero of the Sumerians, was said to have come out of the waters of the Persian Gulf, and so came to be represented as wearing a fish's skin. As Quetzalcoatl of the Toltecs in Mexico, "a saintly ruler and civilizer . . . of another race, a white man with noble features, . . . dwelt twenty years among them, teaching men to follow his austere and virtuous life, . . . at last departed, some say towards the unknown land of Tlapallan,"⁷ Naimlap, with a retinue of many servants, legend tells, came by sea to Llampallec (now Lam-

to China, thence to Korea and Japan. But it is equally certain that it was also carried across the Pacific to America, where it became 'the most striking,' though not original, 'feature of Maya Art.'" Smith, *E. & E.*, 76-77.

The appearance of this remarkable feature in both Asiatic and Mayan cultures could not have been a mere coincidence.

⁶ Plate 17, p. 56, *E. & E.*

⁷ E. B. Tylor, "Mexico, Ancient History," *Encyc. Brit.*, 11th ed.



"WONDER-BEASTS" OF THE NASCAS

H. H. Urteaga, *El Fetichismo de las Yungas y los Huacos Simbólicos de Nasca y del Chimú*. Bol. Soc. Geog. de Lima, 1916. Tom. XXXII, Trim. Seg. y Terc., pp. 168-9.

Note the human form of the goddess attached underneath the body of the "wonder-beast" instead of being carried in its mouth as in the Indian and Mayan examples. Each of the above figures carries the head of a sacrificial victim. The central figure wears a headdress of sacred serpents.

bayeque, Peru,—the “unknown land of Tlapallan”) in many *balsas*,⁸ taught, and ruled, and established the empire of the Moches.⁹ Besides these there were many others,—chiefs, priests, merchants, adventurers, seekers for pearls,—who brought new infusions of culture and gave rise to traditions of the mythical manner in which they had come by sea.

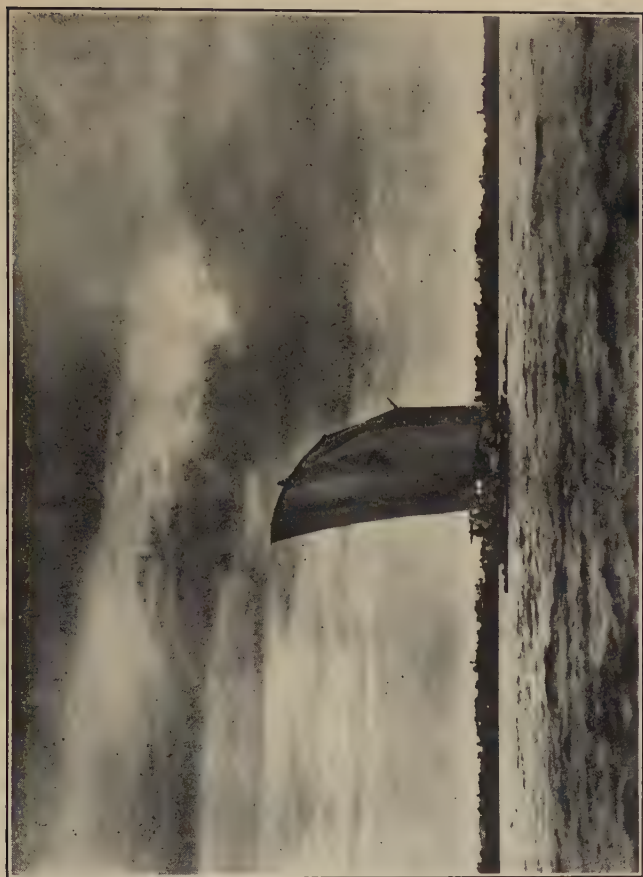
“The anthropomorphic figures of the huacos are not copies of impressions received from a perception of the real; they do not represent nature nor resemble a capricious combination of kind and species. From this it is concluded that the artist was not affected by an overwhelming realism which served as a model for these images. If such realism had been the cause of this artistic tendency, we should have seen the most extreme fidelity to nature in the representation of the man, the fish, or the puma, repeating itself indefinitely. But the contrary is the case. The huaco of Nasca rarely presents the figure of the human or lower species in a normal and definite form. When the artist has transferred the image to his pottery, he has made it, as will be proved, so as to represent all of the totemic or mythical symbols.”¹⁰

“We know from studying the history of this so-called crocodile [the *makara*] that it was originally a composite animal (*Capricorn*) with the head of a ram, goat, an-

⁸ When Pizarro came down the coast he encountered one of these great rafts with a large sail of plaited rushes, propelled by the prevailing wind and current, on a trading expedition up the coast. Similar rafts of balsa wood (lighter than cork), with sails of identical type as that seen by Pizarro, are still in use by the natives on this coast.

⁹ M. C. Bonilla, *Bol. Soc. Geog. de Lima*, XXXVI (1920), 4th quarter, 245.

¹⁰ H. H. Urteaga, “El Fetichismo de los Yungas y los Huacos Simbólicos de Nasca y del Chimú,” *Bol. Soc. Geog. de Lima*, XXXII (1916), 2nd and 3rd quarter, 166.



Balsa (raft) entering the Gulf of Guayaquil, exactly like that which Pizarro encountered, and of the same type as those which have been in use on the Peruvian coast since time immemorial.

Photograph by Dr. Robert Cushman Murphy.

telope, or deer of some sort, and the body of a fish [the early Babylonian form]. This creature was both the personification and the vehicle of Marduk in Babylonia, and of Varuna and Ganga in India. In Indonesia and Japan again the culture hero was represented at various times either as the dragon (*wani*), or as clothed in the dragon's skin (his head emerging from the dragon's mouth), or again as riding upon the dragon's back. All these varied forms occur in Central America.¹¹ The Honduras pot, which I described in 1918, consists of the mythical crocodile called *Imix* by the Maya people (*Cipactli* by the Aztecs), furnished with the horns and the spots of a deer, and the rain-god's head is seen between the dragon's jaws. Seler has called attention to a representation of *Cipactli* in the Codex Fejervary Mayer, as a crocodile acting as the vehicle of Tlaloc, just as de Visser has recorded in Japanese and Indonesian stories, and as we have seen also in India (Varuna) and Babylonia (Marduk)."¹²

Smith also (pp. 81-82 of the same work) makes an interesting comparison of the "Celestial Dog" of Egypt, China, and Honduras. This mythical creature, both in Asia and in America, is the dog of death, or "belongs to the death god." In the Mayan codices it is represented as hanging from the sky holding the lightning in its fore paws, and in the Chinese books it is described as descending from the sky accompanied by thunder.

¹¹ "Seler, *Zeitschrift für Ethnologie*, XLII (1910), p. 31. Fig. 677 on p. 35 is peculiarly instructive. It is the drawing of a mythical 'crocodile' from the Dresden Codex, representing a *makara* of the Indonesian type, with the conventionalized elephant's trunk. A human face protrudes between the jaws." G. E. Smith, *E. & E.*, *supra*, p. 68, n. 1.

¹² *Id.*, pp. 67-68.

See also in the *Bulletin* of the Pan-American Union, February, 1927, p. 113, further examples of the American *makara* from recent excavations, conducted by the Carnegie Institution, at Chichen-Itza.

XV

ATON OF EGYPT WORSHIPPED BY NAME IN PERU

"We die, the same old story to rehearse;
For being is an everlasting quest;
Change, ever change, in every universe;
There is no rest, no rest."

J. MACMILLAN BROWN, *The Riddle of the Pacific*.

THE odes to the omnipotent God,—supplications to the active creator and preserver of the universe,—which had taken form in central Asia before the dispersion of the Aryan race and had been brought to Peru in the early migrations of the great megalithic people by way of the chains of archipelagoes of the South Pacific, were reflected, also, in the Rig-Veda of the Indo-Aryans. "It would be difficult to speak too highly of the ethical nobility of many Vedic hymns. The 'hunger and thirst after righteousness' of the sacred poet recalls the noblest aspirations and regrets of the Hebrew psalmist."¹

They spread also to the west, were recorded in the Iranian Zend-Avesta, and were carried to Syria and Palestine, whence we received them by way of Rome. In the active contact of both war and commerce between the east and the west from immemorial times, the conception embodied in these hymns to the "world dominator, Creator of nature," even found its way to Egypt. The idea which

¹ Andrew Lang, "Mythology," *Encyc. Brit.*, 11th ed.

they expressed was still of the ancient sun-god of the Aryans; but of a god who was greater than the sun, which was simply his principal material manifestation. This conception reached its highest expression in Egypt in the "religious revolution" of Amenhotep IV (1375-1358 B.C.).

Long before this, "even before the conquests in Asia, the priests had made great progress in the interpretation of the gods, and they had now reached a stage in which, like the later Greeks, they were importing semi-philosophical significance into the myths, such as these had, of course, not originally possessed."²

Amenhotep IV ruthlessly abolished the priesthood of Amon, the sun-god, and under the title of *Aton*,—an old Egyptian name of the material sun,—set up the more spiritual worship of the god as an all-wise omnipotent power, sole maker of heaven and earth, who was "beneficent to all his creatures, even the meanest." The King changed his own name from *Amenhotep* (Amon rests) to *Ikhnaton* (spirit of Aton). His Queen, *Nofretete*, took the name of *Nefernefruaton*, and the hymns, or psalms, of "Praise of Aton" are ascribed to the King and Queen alike. In the "boundary stela of Amarna," the sun's rays, terminating in hands, reach out and embrace the worshipping King, his Queen, and daughters.³

This Queen, depicted as beautiful, was a woman of intellectuality and deep spirituality. She had great force of character and exerted a powerful influence over the brilliant and idealistic young King.⁴ She was "perhaps

² J. H. Breasted, *History of Egypt*, p. 356.

³ Breasted, *supra*, p. 370.

⁴ Breasted, *supra*, p. 355.

a woman of Asiatic birth," no doubt a white Princess of a royal Aryan line, as she was married to the most illustrious Prince of his time,—and to her influence was largely due the royal favor now given in Egypt to the nobler Asiatic Aryan religion. She probably brought with her from her Asiatic home the hymns which she and her royal mate used in their devotions ⁵ to the new god of the sun, of the light, and sole creator of the universe, but who also was much more than that.

These hymns embody the Aryan-Asiatic conception of the ruler of all created things, in the form and language of its expression as it reached America, both from the west and from the east, in the prayers of the Ayar-Incas and in the Psalms of our own Bible.

PRaise OF ATON BY KING
IKHNATON AND QUEEN NE-
FERNEFRUATON

PSALM OF DAVID 104:20-26

When thou settest in the
western horizon of heaven,

The world is in darkness like
the dead.

.
Every lion cometh forth
from his den . . .

Darkness reigns,

The world is in silence,

He that made them has gone
to rest in his horizon.

Bright is the earth,

When thou risest in the
horizon,

Thou makest darkness and it
is night:

Wherein all the beasts of the
forest do creep forth.

The young lions roar after
their prey,

And seek their meat from
God.

The sun ariseth, they gather
themselves together,

And lay them down in their
dens.

Man goeth forth unto his
work

⁵ Breasted, *supra*, pp. 371-6.

When thou shinest as Aton
by day.

.
The Two Lands [Egypt]
are in daily festivity . . .

Then in all the world they
do their work.

.
The barques sail up-stream
and down-stream alike.

.
The fish in the river leap up
before thee,

And thy rays are in the midst
of the great sea. . . .

How manifold are all thy
works!

.
O thou sole god, . . .
Thou didst create the earth
according to thy desire.⁶

Nofretete's hymn,—

"Thou makest the seasons, in order to create all thy works:
Winter bringing them coolness,
And the heat [of summer likewise].
Thou hast made the distant heaven to rise therein,
In order to behold all that thou didst make . . ." ⁷

is obviously related to the Peruvian Inca hymn,

The sun—the moon—
The day—the night—
Spring—winter,
Are not ordained in vain
By thee, O Uiracocha.⁸

⁶ Breasted, *ibid.*, pp. 371-374.

⁷ Breasted, *supra*, p. 375.

⁸ Markham, *The Incas of Peru*, p. 100.

And to his labour until the
evening.

O Lord, how manifold are
Thy works!

In wisdom hast thou made
them all:

The earth is full of thy
riches.

So is this great and wide sea,
Wherein are things creeping
innumerable,

Both small and great beasts.
There go the ships:

There is that Leviathan
whom thou hast made to play
therein.

Viracocha was even worshipped by the Peruvians under the very name of Atun (or Aton, as the chroniclers who heard it might fancy to write it down):

"O Creator, thou who art coeval with the world! O Chanca-Uiracocha! O Atun-Uiracocha! Grant our prayer, that thou wilt, with the Creator, give health and prosperity to the people."⁹

The attributes of *Atun-Viracocha* of the Incas, as he shone from the rising sun upon his open temple at Urcos and warmed the chill Peruvian highlands into life, might well be described in the very words defining those of Aton of Egypt.

"To the old sun-god's name is appended the explanatory phrase 'under his name: "Heat which is in the Sun [Aton],"' and he is likewise called 'lord of the Sun [Aton].' The king, therefore, was deifying the vital heat

⁹ Christóval de Molina, "Fables and Rites of the Yncas," *Narratives of the Rites and Laws of the Yncas* (Hak. Soc.), translated and edited by Sir Clements R. Markham, p. 29. The fervid ardor and beauty of the supplication appears more forcibly in the original Quichua:

"Coy [caylla] Uiracochan tieçi Uiracochan hapacochan hualpai huana-Uiracochan chanca-Uiracochan acesa-Uiracochan atun-Uiracochan caylla-Uiracochan tacancuna hunichic llaularuna y achacuc ccapac hahuay pihucupi Puris papas."—Molina, *supra*, p. 29.

Another Inca prayer, typical of our own prayers, is the following (Molina, *ibid.*):

"O Creator! who doest wonders and marvels. O most merciful and almighty Creator! multiply our flocks and cause them to bring forth young, let the land continue in peace and free from danger, and these whom thou hast made, hold them in thy hand."

Compare with this the prayer for the clergy beginning "Almighty and everlasting God who alone workest great marvels," etc. (Episcopal Prayer Book, p. 27); also with the prayer, "O God, from whom all holy desires, all good counsels, and all just works do proceed; Give unto thy servants that peace which the world cannot give; that both our hearts may be set to obey thy commandments and also that by thee we being defended from the fear of our enemies may pass our time in rest and quietness," etc. Prayer Book, 25-6.

which he found accompanying all life. It plays in the new faith a similar important part, which we find it assuming in the early cosmogonic philosophies of the Greeks. Thence, as we might expect, the god is stated to be everywhere active by means of his 'rays,' and his symbol is a disk in the heavens, darting earthward numerous diverging rays which terminate in hands, each grasping the symbol of life."¹⁰

In early times in Egypt the name of this Asiatic Aryan sun-god was pronounced *Atum*.¹¹ As in Asia and Egypt, in Peru various localities had each its local manifestation of the deity. Atun- (or Aton-) Viracocha was the god of the temple, or *huaca*,¹² of Urcos, in the beautiful valley of the Vilcanota. The name *Aton*, for the sun, was an old one in Egypt long before Ikhnaton, under the influence of his Asiatic Queen, established the new religion. No doubt the name, the god's emblem, and the prayers dedicated to him, had reached America,—not from Egypt, but from Aryan-Asiatic sources,—as Atun-Viracocha and his sacred falcon many centuries before Ikhnaton's reign.

¹⁰ James Henry Breasted, *History of Egypt*, pp. 360-61.

¹¹ *Ibid.*, p. 59.

¹² An open-air temple or altar, usually on an eminence,—like the "high-places" of the Asiatic gods and goddesses. They were also used to some extent as we use our churches and churchyards (Westminster Abbey, etc.), as places of burial of the royal and high-caste dead. The *huacas* were sacred places and served as both tombs and temples. They might be magnificent structures of superb masonry built about a consecrated altar of living rock on the pinnacle of a sightly eminence,—as at Ollantaytambo, or Cuelap,—or huge terraced pyramids of brick on the coastal plains,—as at Chan-Chan, Pachacamac, and Lima. Each one, no doubt, had its special priesthood and its own peculiar manifestation of the god,—as Atun-Viracocha, the guardian deity of the *huaca* of Urcos. On a minor scale of the same tendency, even within our own Christian church, there are shrines and edifices dedicated to special saints whose spirits occupy these places.

Atun-Viracocha, of Urcos, bore not only the name Atun, but the falcon, totem of the Incas,—divine fetish of various Egyptian and Asiatic solar deities.¹³

The Falcon and the Eagle, the sacred emblems of the Aryan gods, were “carved in stone at the entrance of the *huaca*” of Urcos.¹⁴ There was another strange feature of this temple. Carved in stone at the entrance, there was “an image of a man with a white robe reaching to his feet, and [a beard?] coming down to his waist.”¹⁵

It is instructive to note that the falcon, guardian totem of the temple-tomb of Urcos, was also the symbol of the Egyptian *ikh*,—the “Glorified Being” in the heaven,—the dead of high caste,—midway “between the gods and the rank and file of the dead.”¹⁶ It was the pagan idea of the soul.

¹³ A. H. Gardiner, “Egypt, Ancient Religion,” *Encyc. Brit.*, 11th ed. *Indra*, the chief god of the Indo-Aryans, “was a hawk.” Andrew Lang, “Mythology,” *Encyc. Brit.*, 11th ed. The Falcon was the sacred emblem and fetish of the Ayar-Incas. Its name was the name of the god *Indi* (applied to the sun by the Incas and evidently a form of *Indra*, the god of the sky and of the rain, of the Hindus). See also authorities cited below.

¹⁴ Molina, *supra*, p. 29. Markham suggests that *Atun* means great. This is the meaning of the word in the Quichua language of the Andes at the present day.

¹⁵ *Id.*

¹⁶ Gardiner, *Encyc. Brit.*, 11th ed., IX 55-56.

XVI

THE GOD BORN FROM A LOTUS

BRAHMĀ, the Indo-Aryan god of light, supreme deity of the Hindus, was "born from a lotus which grew out of the navel of the god Vishnu whilst floating on the primordial waters."¹ The same Paleo-Aryan myth was carried west from central Asia and appeared in the cult of *Re*, the Egyptian sun-god,—chief among the cosmic deities of Egypt,—“father of gods and men,” who embodied the same conception of the primordial elements of the creation. “He arose as a naked babe from a lotus flower that floated on the primeval ocean Nun,”² and was the same god whom the primitive Aryans visualized in the sun. The myth was probably carried to Egypt by the eponymous white race depicted on the Egyptian monuments. (Illustrations in “Egypt,” *Encyc. Brit.*, 11th ed. IX, plate 50, opp. p. 81.)

The Tibetan prayer-wheels interminably repeat “*Om Mani Padme Hum*” (O, Jewel in the heart of the Lotus, Have mercy on me. Amen).³ Is this Buddhist fancy a survival of the same folk-myth in its original central Asian home, whence it was carried both to India and to Egypt?

¹ J. H. Eggeling, “Brahman,” *Encyc. Brit.*, 11th ed.

² A. H. Gardiner, “Egypt, Ancient Religion,” *Encyc. Brit.*, 11th ed.

³ Joseph F. Rock, “Through the Great River Trenches of Asia,” *Nat'l. Geog. Mag.*, Aug., 1926.

The Indo-Aryan *Varuna* was represented as carrying a lotus bloom.⁴

The lotus as the emblem of God was sacred in both India and Egypt. In Egypt it was the fetish of *Nefertem*.⁵

The Hindu goddess *Maya*,—the “cosmic illusion” (as the universe sprang from her she was regarded in the later transcendentalism of the Hindu thinkers as a mere illusion), the “female energy,” “mother of gods and men,”—was sometimes represented as the *sakti* (consort, or female principle) of *Brahma*.⁶ At other times she was the consort or wife of *Siva*,⁷ or an independent goddess.⁸ This same “mother of the gods” was carried to America and appeared in the Maya theogony of Yucatan under the same name,—*Maya*,—in the same functions she performed in India. In Mexico, *Maya* was also called “the mother of the gods.” Other names for her were “nourisher of the human race,” “type of the earth mother.”⁹

Also in Mexico the goddess *Maya* not only was known by the same name and invested with the same functions, but was characterized by the same emblem of the lotus¹⁰

⁴ G. E. Smith, *Elephants and Ethnologists*, p. 75.

⁵ A. H. Gardiner, *supra*.

⁶ Eggeling, “Brahmanism,” *Encyc. Brit.*, 11th ed.

⁷ *Id.*, “Hinduism,” *Encyc. Brit.*, 11th ed.

⁸ *Id.*, “Brahmanism,” *supra*.

⁹ Brasseur de Bourbourg, *Le Système Graphique et la Langue des Mayas* (Paris, 1870), Vol. II, p. 298.

¹⁰ The lotus was the emblem of the divine power of the Ayar rulers of Cuzco. The imperial mace or battle-ax of gold was surmounted by the figure of the lotus. See the interesting pictures of sixteen successive Ayar rulers beginning with Manco Ccapac (Ayar Manco) in *Monarquía Peruana* by Dr. Justo Sahuaraura Inca, Archdeacon of Cuzco and treasurer of the cathedral of Cuzco, seventh in line of lineal descent from the great con-



TUPAC INCA IUPANQUI

From "Monarquía Peruana" by Dr. Justo Sahuaraura, Inca.

Note the mystical Asiatic symbol of divinity,—the sacred lotus, or fleur-de-lis,—upon his scepter and cassock. This was also the emblem of royalty of the French and Egyptian kings. *Ante*, Frontispiece.

While still "Crown Prince," Tupac extended the Incarial rule to Chan-Chan, Cajamarca, Chachapoyas, and Quito. This enterprising leader collected a fleet and carried an army to the Galápagos Islands where he spent considerable time. As indicating a greater diffusion of island races over the Pacific than is generally conceded, Tupac found black Melanesians in the Galápagos and brought "black men" with him on his return to Peru. *Ante*, Vol. I, p. 185.

as in India and Egypt. Her images in Yucatan are adorned with the lotus.¹¹ Like Ishtar, Ashtoreth, and Astarte of the Assyrians, Syrians, Phœnicians, etc., *Maya* of Yucatan was depicted with many mammæ, the emblem of fecundity.¹²

queror emperor, Huayna Ccapac, the latter the father of Atahualpa and Huascar. Printed in Paris, 1850.

It is interesting to note also that the Incarial headdress or crown, *llautu*, or *mascapaycha*, placed above the royal *borla* (the scarlet fringe upon the forehead, the insigne of royalty), was much like a conventionalized Hindu turban surmounted in front by two upright feathers.

¹¹ Brasseur de Bourbourg, *Le Système Graphique et la Langue des Mayas* (Paris, 1870), p. 298.

¹² *Id.*

XVII

THE CRADLE-LAND OF *TULA*

THE legend of the mythical *Tula*,—"Land of Reeds,"—birthplace of the Toltec race, was universal among all the Nahua tribes of Mexico and Central America. This primitive cradle-land was vaguely located in many different places in the myths of the various peoples.¹

We ourselves have inherited the word from the Nahuas. It is in common use in our own language, especially in the western states,—*tule* (reed); and is a very good current example of the process of the diffusion of cultures.

The ancient Paleo-Aryan name of Sumer,—the marshy plain of the Euphrates,—was Kingi,—the "land of reeds."² The archaic Sumerian speech was of Paleo-Aryan stock and Pablo Patrón opens his work³ with the statement: "I propose to show in this work the Sumero-Assyrian origin of the Quichua and Aymará languages of primitive Peru,—spoken even yet by the Indians of this country and Bolivia.

"They are not an isolated case, since the control and influence exerted on the continent by the Semitic languages, the Sumerian and its affinities, are not confined to those limits. On the contrary, long and laborious investigation has taught me that many of the languages of the

¹ *Popol Vuh*, pp. xci, cli.

² J. D. Prince, "Sumer and Sumerian," *Encyc. Brit.*, 11th ed.

³ *Estudios sobre las Lenguas Americanas*, Leipzig, 1907.

New World owe their existence to these sources.”⁴ It is not improbable that the myth of the Nahuas of their origin in “a land of reeds,”—which, like most myths of tribal origin, was persistent through all the ages of the migrations of the race,—had been brought by many stages with the Aryan words which Patrón cites to southeastern Asia and thence to America.⁵

The name of *Anahuac*,—the great central plateau of Mexico,—is said to signify “the country by the waters,”⁶ from the numerous lakes in the valley. The name is the same as that of the ancient town of *Anah*,—on the Euphrates,—with the Aryan adjectival termination added.

The Mesopotamian town which is said to have “retained

⁴ *Lenguas Americanas*, p. 2. Patrón here classes the Sumerian as a Semitic language. It preceded the Semitic in Babylonia and the latter evidently borrowed much from it; but its remains clearly indicate that it was a non-Semitic, Paleo-Aryan tongue.

⁵ It is curious that *Balam*, and *Ahab* or *Agab*, names of legendary prophets of the Euphrates,—possibly preserved as tribal names in the great dispersion and carried from one stopping place to another in the various migrations,—are among the conspicuous mythical founders, kings, and demigods of the Nahua tribes. *Popol Vuh*, pp. cclxvi, 199-287.

Dr. Daniel G. Brinton, *Books of Chilán Balam*, p. 7, note, says: “Señor Eligio Ancona, in his recently published *Historia de Ucután*, offers the absurd suggestion that the name *Balam* was given to the native soothsayers by the early missionaries in ridicule, deriving it from the well-known personage in the Old Testament.” Brinton says that *balam* means tiger, that it was not a proper name, and that it was a general designation of the priesthood. However, he does not show any connection between tigers and the priesthood, or the latter’s designation as *balam*. As the tiger was a totem the sacred name may have been given to it as a part of its worship.

The idea that the missionaries suggested the word to the soothsayers in ridicule is no doubt “absurd”; but the fact that the word was a general title of all priests and soothsayers (magicians or medicine men) strengthens rather than weakens the tentative hypothesis that it may have been brought over by immigrants of Asiatic ancestry indirectly from Asia, where it was possibly used in the same general sense. Balaam was an ancient figure of Asiatic fable and tradition long before the Bible story of Balaam who came “from Aram” and the “mountains of the east.” Numbers XXIII, 7. *Encyc. Brit.*, 11th ed. III, 231.

⁶ “*Anahuac*,” *Encyc. Brit.*, 11th ed.

its name for forty-one centuries,"—but which probably existed for many centuries before the date of any record of it which has been preserved,—is variously described as on an island, or on several islands, as "in the middle of the Euphrates," and as in part "so surrounded by the river that you cannot go into it but by boats."⁷ From the emphasis laid on its watery surroundings, it is very likely that the name of this Sumerian and later Babylonian town had the same significance as the Mexican *Anahuac*.

It may seem unlikely that the tradition of the "Land of Reeds" in western Asia could have reached the Nahua tribes, but it is no more so than the bringing of Sumerian words from the ancient Paleo-Aryan tongue of *Kingi*,—this same "Land of Reeds" on the Euphrates,—to America, or to both from some other common source; as for example, Sumerian, *ka* (mouth); Quichua, *ka* (mouth); Sumerian, *kud* (cut); Quichua, *kut* (cut).⁸

In this last case, as in many other Quichua words, the word is the same in our own language,—so that it has reached America from the same source by both the east and the west. Tradition is the most enduring of all man's forms of expression. In all parts of the world oral traditions of man's creation and earliest experiences are passed on in full vigor to the new generation, while libraries of books and manuscripts have been lost and destroyed and the mightiest monuments of brick and stone forgotten.

We ourselves in the United States have received from the same western Asian source the stories of the creation and Eden,—of man's fall and the destruction of the world.

⁷ H. W. Hogg, "Anah," *Encyc. Brit.*, 11th ed.

⁸ Pablo Patrón, *Lenguas Americanas*, pp. 48, 50.

The road from central Asia to America, by way of the Pacific, was much more direct than by way of Europe and the Atlantic,—and it was a thoroughfare, the route of great migrations of comparatively cultured peoples, long before the races who brought these traditions to America from Europe had become civilized. That these migrations brought the name and tradition of the “Land of Reeds” to Mexico and Guatemala is as probable as the diffusion by the same route of religious legends from the valley of the Euphrates, which the Spaniards found in America on their arrival.

The legend of man’s origin in a marsh, or “land of reeds,” had also reached Greece, Libya, and Egypt.⁹ Brasseur connects the legendary *Ultima Thule* of the ancient Greek and Roman geographers,—located vaguely in the extreme northern seas,—with this mythical cradle-land.¹⁰

The name is still borne by the San Blas Indians of the Gulf of Darien,—a branch of the Nahua people of Mexico, driven southward, who have, in great measure, maintained their independence on the Isthmus to the present time. They have never been conquered by the Spaniards. In a recent quarrel between them and the authorities of Panama, they were visited by Dr. South, the American Minister in Panama, whose services as arbitrator were accepted by them. He went to their country in an airplane and was cordially received. He found them an intelligent and interesting people. Their own name for themselves is *Tule*.

⁹ Andrew Lang, “Mythology,” *Encyc. Brit.*, 11th ed.

¹⁰ *Popol Vuh*, p. xci.

Although in the opinion of many writers a decadence had set in among all of the Indian nations at the time of the conquest,—due to tribal wars which made them easy victims of the Spaniards,—they were still superior to the miserable remnants which are now left. The Indians of Darien possessed features of the cultures of Cuba, Haiti, Nahua, and even of Japan.¹¹ Brasseur de Bourbourg suggests that the American continent is inappropriately called the “*New World*.”

When the ancient Tules, Toltecs, and other Nahuatl tribes were driven out of their Mexican home-lands by fiercer but less cultured kindred tribes,—“fighting foot by foot”¹² for their possessions but forced to give way in many successive struggles,—branches of their race migrated both to the north and to the south, and their place-names and tribal titles are still found from Mississippi and Tennessee to Peru and the Argentine.¹³

¹¹ *Popol Vuh*, p. cciv.

¹² *Popol Vuh*, p. clix.

¹³ *Popol Vuh*, pp. clxiii *et seq.*, cxcvi.

XVIII

THE GREEN IDOL

THE sacred jade of the Chinese no doubt acquired the magical medicinal powers attributed to it by some fancied association with the green dragon god. In fact it was the symbol of the god,—in the flowery Chinese way of speaking, “the quintessence of heaven and earth.”¹ A jade shaft stands over the body of Tamerlane at Samarkand.

The green dragon reappears in Mexico and Central America in Quetzalcoatl, the “feathered serpent,” clothed in the green plumage of the humming bird and assuming among the Toltecs the form of a “white and bearded man” who gave them their arts and religion.² Possibly the symbolic and the magical virtues of green were connected in the vivid imaginations of a primitive race of farmers and herdsmen with the annual return of the sun in the spring and the rebirth of nature in the northern highlands of Asia. The earth clothed itself in green. The green

¹ F. W. Rudler, “Jade,” *Encyc. Brit.*, 11th ed., citing H. A. Giles.

² E. B. Tylor, “Mexico, Ancient History,” *Encyc. Brit.*, 11th ed., p. 331.

“At the time of the Spanish conquest of Mexico, amulets of green stone were highly venerated, and it is believed that jadeite was one of the stones prized under the name of *chalchihuitl*.” (Rudler, *supra*.) The continuity of culture which connects Asia and Europe with ancient America is shown by this Nahuatl word *chalchihuitl*, obviously of the same root as the Greek *chalkedon* (precious stone), which has reached us in *Chalcedony*.

Skulls obtained by Kroeber from graves at Chan-Chan were stained green about the teeth from bits of copper laid in the mouth at burial. (*Ancient Pottery from Trujillo*, p. 16.) In Mexico small disks of green stone were often placed in the mouths of the dead.

sprouts of the coming crops appeared above the brown earth. The winter-famished cattle fattened on the new grass of the verdure-covered hills.³

In Mexico the sacred and symbolic green stone lay before the image of Huitzilopochtli. "At the death of a (Mexican) king, the corpse, laid out in state, was provided by the priest with a jug of water for his journey, and with bunches of cut papers to pass him safely through each danger of the road—the place where the two mountains strike together, the road guarded by the great snake and the great alligator, the eight deserts and the eight hills; they gave him garments to protect him from the cutting wind, and buried a little dog by his side to carry him across the nine waters. Then the royal body was invested in the mantles of his patron-gods, especially that of the war-god (Huitzilopochtli), for the Mexican kings were warriors; on his face was placed a mask of turquoise mosaic, and a green chalchihuite-stone as a heart between his lips."⁴

The images of twenty chiefs of Nochan (Nachan), worshippers of *Votan*, in Guatemala were of green nephrite.⁵

The same conception of the symbolic or totemic virtue of the green stone had reached Peru. By the side of the immense red porphyry slab, one of the "tired stones" on the stupendous "inclined way" by which the huge altar pieces were being brought from the distant quarry to the

³ Green jade was important in Chinese religious ritual and symbolism. It was symbolic of the spring and growing vegetation. Berthold Laufer, *Jade* (Field Museum, 1912), p. 172, quoting from the great Chinese work on religious ritual, *Chou Li*.

⁴ E. B. Tylor and W. Lehmann, "Mexico, Ancient Civilization," *Encyc. Brit.*, 11th ed., pp. 334-5.

⁵ José Kimmich, *Bol. Soc. Geog. de Lima*, XXXIV (1918), pp. 62, 64.

“high-place” for the construction of the superb megalithic temple of Ollantaytambo, lies a similar *green stone*. Its color is vivid in contrast with the red megaliths in the midst of which it was to be placed. It was no doubt intended as the sacrificial block in the unfinished temple.

The sacred green stone also appeared in the temple of Chot in Lambayeque,—the ancient Llampallec or Llampallan. “The first act [of the ancient settlers] was to build a temple to Chot where they placed the image of their chief, Naimlap, carved in *green stone*,—which they worshipped under the name of *Llampallec*.⁶ A sacrilege committed against this green idol is said to have caused the downfall of the dynasty of Naimlap.

The young prince, Tempellec, who then occupied the throne of the Chimus, for some unexplained reason desired to take the green idol out of the temple of Chot and remove it to another place. This was said to have offended the god. The truth probably was, as in many another temple, it was not so much an offense to the god as to the priesthood of the temple, who maintained their influence by their custody of the sacred green idol,—and who naturally resented the idea of its removal. There ensued a religious-political plot characteristic of court and temple circles.

The priests employed the familiar strategy of making use of a beautiful girl to destroy their victim. As usual they blamed it on the devil. “Tempellec, for one moment of love, lost his throne and his life and besides was the cause of great misfortunes to his subjects. The evil genius incarnated in the form of a young, beautiful, and

⁶ M. C. Bonilla, “Llampallec,” *Bol. Soc. Geog. de Lima*, XXXVI (1920), 4th quarter, 247.

alluring woman appeared to the prince. Weak in the presence of her charms and feminine seduction, Tempellec sinned,—and his sin caused a terrible flood which lasted for thirty days.”

This observation in the chronicle of the tradition, about the flood at Lambayeque, is corroborative, in a way, of the legend. The north Peruvian coast is ordinarily rainless,—but at intervals of seven years, or so, on account of changes in the sun and consequent changes in the prevailing winds which in turn bring about changes in the ocean currents, rains occur on the desert coast. Heavier torrential storms occur at longer intervals. One such down-pour took place in 1925, when “395 millimeters of rain fell during the month of March as against 35 millimeters for the preceding seven years.”⁷

From the amount of damage done by this rain to the adobe ruins of Chan-Chan, as compared with their previous comparatively good state of preservation, it seems probable that no such rain had occurred at Lambayeque for hundreds of years. The tradition that pestilence and famine followed the flood in the time of Tempellec is also corroborated by modern experiences.

As was natural the priests told the people that the calamity,—which seemed supernatural to them as they had probably never known such a deluge before,—was due to the sin of Tempellec. As at the present day might be the case under similar circumstances, the public and even the prince’s own family were ready to believe the slander when it came from such sources and when a victim and an atonement were essential to their own interests.

⁷ R. C. Murphy, *Geographical Review*, Jan., 1926, citing Otto Holstein.

“The priests and heads of families, informed of the weakness of the inexperienced young man, possessed themselves of his person and threw him into the sea.” In this way the deluge was stopped; and, what was probably more important to the priests, the dynasty of Naimlap was brought to an end. The priests of the temple of Chot remained in possession of the green idol of Llampallec.

XIX

ANCESTORS OF THE INCAS AND OF OURSELVES

"The beginnings of my own journey did not lie in scientific study, nor was I sent on a 'mission' or 'expedition' of any kind. I came to it more in the way of an old man dreaming a dream or a young man seeing a vision. But it did proceed, in some sort, from political and economic things—from a sense of the complex unity of history, a stream of grand volume descending from discoverable sources. It all began in a longing to travel the caravan ways in the old manner of caravans, because I had had a glimpse of what they meant—a survival from the past but more than that: one of the sources or headwaters of our life as it is."

Owen Lattimore, "Caravans of the Winding Road" (*Jao Lu*—from Kweihua to Kucheng-tse), *Asia Magazine*, December, 1928.

ON the high plateau of central Asia there flourished perhaps a greater variety and abundance of animal life than anywhere else in the world, except possibly on the grassy plains of South Africa. The yak, the sheep, the goat, the dog, the swine, many varieties of deer, the antelope, the ass, the camel, the ox, the horse, abounded. Enormous flocks of wildfowl fed and bred on the borders of the shallow lakes. On the plateaus covered with rich grasses among the foothills of the mountains above the borders of the desert the great herds of grazing animals were followed by the carnivores.

The balance of food and climate was such that there was a profusion of species, kind warred on kind,—primeval man among the rest. It was a war of claw and fang, of

horn and hoof, of speed, cunning, and endurance, of protective coloration, of keenness of sight and scent. Nature preserved some of her species by their timidity, others by their courage, some by mere numbers. By the destruction of vast numbers others survived and the demand upon the available food supply was regulated.

Man held his own and found his food among them,¹ not so much by his strength or by his speed, or by his strange mixture of timidity and courage, but largely by his stealth and cunning. In the sharpness of his senses primeval man was the equal of many of the other creatures with which he struggled for survival; in physical endurance as well as mental determination he was superior to them all. But he survived in the life-and-death contest because of a power of thought which he developed by which he was enabled very early to bring artificial resources to his assistance,—to employ strategy and to deliberately make provision for the future. He developed a closer social cooperation than the other species with which he had to contend. The extremes of temperature and the exigencies of the seasons—the necessity of storing food in time of plenty against the day of want—were such in this early theater of life that the dull, the improvident, and the weak perished.

As man's survival had depended on his mental rather than his physical powers, the former rather than the latter

¹ Central and western Asia was "the center where the races of mankind were first developed and from which they have migrated to all parts of the world. . . . The study of language also leads us to the same center of original dispersion." G. Frederick Wright, *Origin and Antiquity of Man*, pp. 351-52. The author expresses the opinion that in the post-glacial period central Asia was the most favorable habitat for man. Widney, *Aryan Peoples*, places the Proto-Aryan cradle-land on the plateaus of Central Asia.

were enlarged and developed by the process of selection, though both were necessary in the desperate struggle. He not only killed and ate most of the other species,—when the others did not kill and eat him or leave him to perish of hunger by escaping from his chase,—but he made an associate and friend of many species, at first no doubt by capturing their helpless young and rearing them under his care and control. From this he proceeded to breed them in captivity and eventually use them as his aids in the pursuit and mastery of their kind, to hunt for him, to carry him in the chase, or in his travels. By having numbers of animals under his control, to be used for food or to furnish material for clothing and shelter, primitive man became in reality a lord of creation, more or less independent of the seasons and of the cruel uncertainties of the chase.

In the possession of his domestic herds the principle of private property arose. His cattle constituted his wealth² and enabled him to carry his substance with him and to move at will over the enormous plains of Asia and Europe. His supply of food, clothing, shelter and transportation moved itself and maintained itself on the country.

When man domesticated horses and subjected them to

² The Aryan Latins inherited the same idea; *pecunia*, property,—*pecus*, cattle. Note the apparent identity of the Quichua *vicuña* (the wild stock of the Andes). The same definition of property or wealth inherited by the Aryan Spaniards appears in *ganado* (past participle of *ganar*, to gain, to acquire), cattle,—English, *gain*, Polynesian, *gano*. Cf. Quichua *guanaco* (Andean wild live stock), evidently from the same archaic root. This same Proto-Aryan idea persists in the word *cattle* from *capital*, property (Funk & Wagnalls Dictionary); also in *stock*, meaning both live stock and wealth or property, as corporate stock, stocks of goods, etc. A similar example of the Aryan conception of wealth as consisting in land and its products appears in the Spanish *hacienda* (landed estate) also meaning treasury.

his service, he became superman. By this great achievement he combined the speed and strength of those swift and powerful animals with his own intelligence. Mounted upon the back of one of these, man was a centaur, six-limbed instead of four, and roamed the great plains of Asia like a new and superior though artificial being that had not been created among the rest but was a new form which he had given himself by his own intelligence, and which he could put on and take off,—this the mythical centaur could not do,—as he chose, like a god. Thus the Paleo-Aryan man acquired a large measure of dominion over the forces of nature. By this vital step in his progress he multiplied his mobility and diffused himself more rapidly over the globe.

Unnumbered thousands of years were required in the process of reaching this position of independence when man became, to a certain extent, the master of his own fate. After this his progress, though it extended through thousands of years of prehistoric time, was comparatively rapid. His advance was accelerated and facilitated by every invention and every advantage which he gained. From this time on, by having a steadier supply of food, his numbers increased more rapidly. Freed from the sordid struggle for mere existence, he found time for thought, and culture was evolved.

Paleo-Aryan man made another enormous step forward when he learned to till the ground and taught his domestic animals to aid him in this work.³

³ Agriculture became the distinguishing characteristic of this race. By force of necessity in following it, the Aryans became, for a time at least, fixed residents in certain communities, which gave them a superiority over mere nomad herdsmen, and opportunities for further improvement and

So having freed itself from the shackles of mere animalism and become in a measure master of its own movements, this great race, from which eventually sprang the Aryan line, sent its branches far and wide, not in one direction only but in all directions where soil and climate attracted to the furthest quarters of the earth.⁴

"In the great plain which extends across Europe north of the Alps and Carpathians and across Asia north of the Hindu Kush there are few geographical obstacles to prevent the rapid spread of peoples from any part of its area to any other, and, as we have seen, the Celts and the Hungarians, etc., have, in the historical period, demonstrated the rapidity with which such migrations could be made."⁵

No doubt even before this era man had found his way to America; but neither those earlier men nor this later race, whose religion, language, and family institutions have, in large part, come down to our own times,—whether

development of culture. It is probable that the name *Aryan*, which was assumed as a title descriptive of occupation and caste rather than as a racial name, signified those who tilled the soil. (See the Spanish *arar*,—to plow, our own *arable*, etc.) In later ages, in the rigor and refinements of the Indo-Aryan caste system, agriculture was placed at the head of all industrial occupations.

"The transition [from a nomad life of shepherds and hunters], moreover, to settled life and agriculture belongs to the Aryan period; and to it may be traced the peculiar sanctity of the cow in India and Persia." Eduard Meyer, "Persia, Ancient History," *Encyc. Brit.*, 11th ed.

⁴ "Whilst one body of the great Indo-European migration from Asia was advancing by detachments into our temperate countries [Europe], another corps descended through the defiles of the Hindu Kush and by the basin of the Indus into the vast plain of the Ganges." Alfred Maury, in Nott and Gliddon's *Indigenous Races*, p. 52.

The cradle of the Polynesian languages was southeast Asia. They were derived from the "same family as Chinese," and were connected with the Tibetan and Siamese. Wilson D. Wallis, *Introduction to Anthropology*.

⁵ Peter Giles, "Indo-European Languages," *Encyc. Brit.*, 11th ed.

they followed the chain of the Aleutians, or crossed by way of Bering Strait, or put to sea from the land's end of southeastern Asia in their great canoes,—were able to carry their cattle with them. If they started with domestic animals, these were probably consumed on the way, before the voyagers or their descendants arrived at the new continent.

XX

DISPERSION OF THE WHITE RACES

This, I read somewhere in a learned book:
The Aryan hordes were a united pack
In Asia, till dissevered by the lack
Of peace between dark tribes and light, which shook
The clans asunder: east and west, each took
Globe-girdling ways.

LILIAN WHITE SPENCER in *Norfolk Lyric*.

THE development of the Paleo-Aryan culture and the beginning of the migrations of that race from the highlands of central Asia lie far back in the Paleolithic age. "The Hindus, Medes, Persians, Greeks, Romans, Germans, Celts, and Slavs make their appearance at more or less remote dates as nations separate in language as in history. Nevertheless, it is now acknowledged that at some far remoter time, before the nations were divided from the parent stock and distributed over Asia and Europe, a single barbaric people stood as physical and political representative of the nascent Aryan race, speaking a now extinct Aryan language, from which, by a series of modifications not to be estimated as possible within many thousands of years, there arose languages which have been mutually unintelligible since the dawn of history."¹

Though much still remains of the marvelous profusion of animal and vegetable species which once flourished in the central home of the Paleo-Aryan stock about the foot-

¹ E. B. Tylor, "Anthropology," *Encyc. Brit.*, 11th ed.

hills of the Kuenlun, on the plateaus and mountains of Turkestan, it is now confined to limited areas, or driven back into remote recesses of the desert.² From most of the area man has disappeared or reverted to the state of mere nomad and hunter. The face of the country has undergone an astounding change. Land that was once covered by great lakes or inland seas is now a baked desert of drifting sand and bare clay gullies swept and polished by the constant wind. Dry coulees, mere beds of sun-burnt rocks winding through wastes of sand-strewn hills stripped of soil, mark the courses of ancient rivers which once supported a thriving agriculture and nourished old civilizations.

"The whole area is now undergoing geological changes on a vast scale. Rivers have changed their courses, and lakes their outlines. Far away from their present shores

² Aryan literature speaks of the original home-land, before the diffusion, as a land of "winter snows," of "stabled cattle," of "sheep" and "clothing of wool"; but also as a "land of pastures" and "meadow grasses," of "butter and milk," of the "red apple," and of "autumn harvests" and the "grass piles" of the haying. Widney, *Aryan Peoples*, I, 11.

As to the "*fons et origo*" of the Polynesian race, Churchill, "Root Reducibility in Polynesian," *Polyn. Soc. Jour.*, XV (1906), 123, says that he gathers, preserved in the "roots and seeds of the language," that it was "a land so high that the air is chill and folk gather about the fire for comfort. It is a surface sloping toward the west and the setting sun. It is scored with gullies, sometimes dry channels of rock, anon booming bank high with the spate of torrential streams. The eastern prospect is bounded by a distant sierra, so remote that its outlines are but faintly shown by the rising sun. Between the inhabited *Hawa* and this limiting sierra is some commonplace natural barrier which prevents the further advance of the people in that direction. The sea it may hardly be. Perhaps it is the impassable drought of desert land where is no food or water. Other lines are added to the sketch of primeval *Hawa*, out of the dust of ancient *Vavau*, collected from the roots and seeds the language preserves."

This fits the high plateau of south central Asia, hypothecated by Edward Tregear and others as the cradle of the Polynesian race and of its mother Proto-Aryan stock.

the geologist finds indubitable signs of the recent presence of lakes in the shells they have left amid the sands. Traces of former rivers and channels, which were the main arteries of prosperous regions within the period of written history, have now disappeared. Of the highly developed civilizations which grew up and flourished in Bactria, Bokhara, and Samarkand the last survivals are now undergoing rapid obliteration with the simultaneous desiccation of the rivers and lakes. The great 'Blue Sea' of Central Asia, the Sea of Aral, which at a recent epoch (Post-Glacial) extended south-west as far as Sary-kamysh, and the shells of which are found north and east of its present shores 50 to 200 feet above its present level (157 feet above the ocean, and 248 above the Caspian), now occupies but a small portion of its former extent. It fills a shallow depression which is drying up with astonishing rapidity, so that the process of desiccation can be shown on surveys separated by intervals of only ten years; large parts of it, like Aibughir Gulf, have dried up since the Russians took possession of its shores. The whole country is dotted over with lakes, which are rapidly disappearing under the hot winds of the deserts."³

There is no doubt of the immense period of time required for the development of this Paleo-Aryan culture, including its language, in which are recorded the stages of its cultural growth, and for the spread and specialization,—first the rise of the ancestral stock and then the differentiation and development of such widely differing types,—of the great races in Asia, Europe, and America.

³ J. T. Bealby and Prince Peter A. Kropotkin, "Turkestan," *Encyc. Brit.*, 11th ed.

The distinguished author quoted above probably over-estimates the time required for a differentiation of the dialects and tongues from a common parent stock. The comparative rapidity with which new dialects, which soon become mutually unintelligible tongues, are evolved, even in the same race and family of people, is of common observation everywhere and is especially shown in the multiplicity of languages among the negroes of Africa, the Indians of America, and the Tibeto-Burman tribes of southeastern Asia.⁴

"It is indeed probable that the languages, not only of the Semites and of the Indo-Europeans, but also those of other races, are derived from the same stock, but the separation must have taken place at so remote a period that the changes which these languages underwent in pre-historic times have completely effaced what features they possessed in common . . . It must be remembered that it is only in exceptionally favourable circumstances that cognate languages are so preserved during long periods as to render it possible for scientific analysis to prove their relationship with one another."⁵

Upon either aspect of the problem,—the immense period of time which has elapsed since the dispersion of the races from a common center, and the rapidity with which languages often become modified and even completely changed, as shown in the history of all the great languages,—the phenomenon of similarity of structure

⁴ Where it is said that "one small tribe has changed its language in the course of a couple of generations so as to be unrecognizable." Sten Konow, "Tibeto-Burman Languages," *Encyc. Brit.*, 11th ed.

⁵ Theodor Nöldeke, "Semitic Languages," *Encyc. Brit.*, 11th ed.

In the *Gathas* of the Irano-Aryans mention is made of the "ancient Aryan Land" (*Airyana Vaejant*). Cf. the Spanish *viejo*, old, ancient.

and identity of many words in the English (as well as all other Indo-European languages) and the Quiché, Maya, and Quichua tongues of Central America, Yucatan and Peru, as set forth in this work, appears as more striking proof of the kinship of these peoples who spread from a common ancestral home in Asia and reached America from opposite directions,—one group by way of the Pacific and the other by the Atlantic.⁶

⁶ "The distribution of the Caspian type today is a curious one, since the areas of its concentration are very widely separated. The largest, and that in which it is present in greatest purity, is, paradoxically enough, that occupied by the Eskimo [the author no doubt is referring to evidences of prehistoric occupation], the second most important one comprising northern and northeastern Africa. A third area extends along the southeastern coast of South America, while a last includes Scandinavia and Great Britain. As an important minority factor the type is very widely spread . . . in northern India (where in places it is strongly dominant), in Tibet (?), in China, in some of the islands of Micronesia, in New Zealand, and in isolated places *along the Pacific shores of America*." (Italics mine.—M. P.)

The Caspian type "reached China and Japan by the end of Neolithic times. . . .

"The earliest ascertainable homeland for peoples of this type lies in the great Eur-Asiatic steppe region of southeastern Russia and southwestern Siberia . . .

"Tall in stature, fair-skinned, probably with brown, slightly wavy hair and hazel eyes, the people of this type had inherent in them a strong tendency toward blondness, which, whenever the conditions favored, became more and more pronounced, reaching its climax in the Baltic region. . . .

"We must probably assume that their occupation of this territory [the 'Eur-Asiatic steppe'] goes back far into Palæolithic times. . . .

"I believe that they very early also moved eastward, keeping along or to the north of the margin of the great plateaus, and so across Bering Strait into America, to which this type may have supplied its first inhabitants. . . .

"A so-called 'Caucasic' element has long been mooted in parts of Polynesia, and this seems . . . to be confirmed."—Roland B. Dixon, *The Racial History of Man*, pp. 482-84.

S. Percy Smith, "Aryan-Polynesian Points of Contact," *Polyn. Soc. Jour.*, XIX, 84, calls attention to the Maori word *Irihia* as one of the Maori designations of the cradle-land,—*Hawaiki-nui*, Rarotongan *Atia-te-varinga-nui*. Smith suggests that by considering the metathesis of *r* to *n* (these letters are "interchangeable under Grimm's law") we get *Inihia*, reminding one of *India*. The word *Irihia* in fact is more suggestive of *Iria*, or *Irya* (like the Persian *Iran*), of more ancient Proto-Aryan origin.

In remote ages a Paleo-Aryan white race of shepherds, herdsmen, and farmers, which had also sent its branches eastward and westward, founding tribes and nations, spread to the south and southeast through the passes of the Hindu Kush and Trans-Himalaya to the delightful foothills and rich alluvial valleys of India and Indo-China. It carried to India in remote times its megalithic culture, and in later periods developed the Sanskrit tongue and left enduring traces all along the eastern coast of the Asiatic continent.⁷

Like the hill tribes of Kentucky, stranded or preferentially remaining in the mountains in the westward migration of the United States, while their brothers passed on to the Bluegrass, some of this early Aryan race settled in the mountains and cañons of western China and Tibet

⁷ Under the pressure of the warring tribes from behind, some of the earliest immigrants put to sea, carrying the archaic Proto-Aryan tongue to the islands of the Pacific.

That the Polynesian language became isolated from its ancient mother tongue before that tongue had acquired even the agglutinations of secondary forms of speech, not to mention the inflections of the Sanskrit and other Indo-European languages, is indicated by Churchill in his learned and intense special study of certain features of the language. *Polyn. Jour.*, XV (1906), 124. He intimates that this will throw light upon the antiquity of Polynesian migrations.

"Students will gladly follow along the Polynesian path here indicated the way that will lead them past the ultimate point attainable in the Indo-European family, the Sanskrit root that has resisted reduction. Polynesian speech gives us the new point on which to stand in philological studies, and from this new point of view the near prospect is upon the practice of such simple sounds as are unartfully producible by the human vocal apparatus regarded as a wind instrument whose solfeggio is not yet determined, the trial of still simple combinations of such elemental sounds, and the discriminative selection of such sounds as are in concord for the use of human speech."

He says, "It is momentous that the Polynesian is being made to yield to philology forms of speech so embryonic that by them we can place ourselves at the point where the near vision must yield us a view of a speech in the making, even if not the genesis of the speech itself." *Ibid.*, p. 120.

and have been the victims of an arrested development,—their descendants living today, in the deep gorges or on the high ranges which enclose the upper waters of the Irrawaddy, the Salwin, the Mekong, the Yangtse, and the Chindwin rivers, much the same semi-barbaric—though now more or less degenerate—life as their ancestors of several thousands of years ago. Their kindred who went on and became settled farmers in the lower plains of Burma and Cambodia became rich, and in the course of centuries acquired a culture and arts that flowered in a brilliant and in some respects gorgeous civilization.⁸ The contrast produced by varying environment was similar to that which produced from the same original stock the indigent and ignorant “Cracker” of the Cumberland Mountains and the proud Kentuckian of the Bluegrass.

In contact and almost constantly at war with darker indigenous races,—the conquering tribes being gradually absorbed into the mass of the conquered,—these people from the highlands in the course of generations became a mixed and darker people. Nevertheless even today, both in the lowlands of India and Indo-China and in the original highland home of the race, much evidence of white blood remains. It is found, as in China and Japan, better preserved in the royal and aristocratic classes, where, as in the Incarial *Ayar* nobility of Peru prior to the Spanish conquest, it has been protected in a measure by the

⁸ Paleo-Aryan immigration into Ceylon established a great civilization there and progressed thence into the Pacific islands. Charles E. Woodruff, *Effects of Tropical Light on White Men*, pp. 260-61.

S. Percy Smith (*Polyn. Soc. Jour.*, XXVIII), compares the Aryan name of the Fatherland, *Eran*, with the Polynesian *Herangi*, *Erangi*, *Halani*, *Harani*.

rigid rules of caste against the sea of darker blood which surged around it.⁹

⁹ "Tibetan women . . . are intensely vain of their personal appearance. . . . Many of them are fair in color,—certainly no darker than the peoples of western Europe; and the fairer the woman the greater the pains she takes to retain her beauty. Those of high birth and wealth are much fairer than those of the peasantry whose strenuous outdoor life makes it impossible for them to retain a smooth, fair skin very long."—F. W. P., *New York Times*, Nov. 28, 1926.

"The White Huns, who troubled the Persian empire from about 420 to 557," and whose ancestors left their place-names, such as Hiung-nu,—which is generally considered to be a Hun place-name (*Encyc. Brit.* 11th ed., Vol. XIII, p. 540),—and possibly Honan, Yunnan, and Hunan, in China (the Aryan termination of these names,—*an*, meaning place or land,—is very significant), were no doubt descendants of people who made their contribution to this white blood which survives today in Tibet and China. Other hordes of this "warlike, vigorous race," or kindred races, were the Hûnas, "who invaded India during the same period," and "the Huns, who invaded the East Roman empire from about A.D. 372 to 453 and were most formidable under the leadership of Attila."

The process of mixture of blood was rife then as now. "The physical characteristics of these nomadic armies were very variable, since they continually increased their numbers by slaves, women, and soldiers of fortune drawn from all the surrounding races." Others were the Hungarians, or Magyars, who "crossed the Carpathians into Hungary in A.D. 898 and mingled with the races they found there." Sir Charles Eliot, "Huns," *Encyc. Brit.*, 11th ed.

A remnant of the great white race which swarmed from central Asia is found in the *Galchas* now living in the mountains of Turkestan. They are descendants of the Aryan Tajik, "the aborigines of the fertile parts of Turkestan." They "constitute the intellectual element of the country and are the principal owners of the irrigated land . . .

"The people who inhabit the plains and mountain slopes of East Turkestan consist partly of Aryans and partly of races of Ural-Altaic stock . . .

"It appears very probable that at the dawn of history East Turkestan was inhabited by an Aryan population, the ancestors of the present Slav and Teutonic races, and that a civilization not inferior to that of Bactria had already developed at that time in the region of the Tarim." Khotan was the most important city. (Note the distinctive Aryan termination.) "One portion of the Aryans emigrated and settled in what is now Wakhhan (on the Pamir plateau), the present language of which seems very old, dating anterior to the separation of the Vedic and Zend languages."—J. T. Bealby and Prince Peter A. Kropotkin, "Turkestan," *Encyc. Brit.*, 11th ed.

In an interesting note these authors say: "In connexion with the objection based on the sub-boreal character of the regions which were the cradle of the Aryans, as proved by the so-called palaeontology of the Aryan lan-

guages, it may be observed that by the end of the Glacial, and during the earlier Lacustrine (Post-Glacial) period, the vegetation of Turkestan and of Central Asia was quite different from what it is now. It was Siberian or north European. The researches by M. Krasnov (in *Izvestia* of Russ. Geog. Soc., St. Petersburg, 1887, Vol. XXIII) as to the characteristics of the former flora of the Tianshan and the changes it has undergone in consequence of the extremely rapid desiccation of Central Asia, must be carefully borne in mind in all speculations founded upon the testimony of language as to the original home of the Aryans."

XXI

THE PALEO-ARYAN MEGALITHIC RACE

And on the stony features of each god
There broods the same far mystic smile,
As if they knew the world was at their nod,
Alone on their lone isle.

J. MACMILLAN BROWN, *The Riddle of the Pacific*.

THE builders of Sacsahuaman at Cuzco were descendants of the race of Titans whose offshoots raised the menhirs, —the huge stone columns of Brittany, India, northern Africa, and central Asia.¹

This parent-Aryan race of sun-worshippers which erected these Cyclopean monuments to its dead and these altars to its solar god no doubt migrated in different directions from the highlands of central Asia.² It was the same race which carried its culture to Syria

¹ "At Locmariaquer, Morbihan [France], is the largest menhir in the world. It was in the form of a smooth-sided obelisk, but now lies on the ground broken into four fragments, the aggregate length of which amounts to 20.50 meters (about 67 feet). It was made of granite foreign to the neighbourhood, and its weight, according to the most recent calculations, amounted to . . . 342 tons" (*L'Homme*, 1885, p. 193). Robert Munro, "Stone Monuments," *Encyc. Brit.*, 11th ed.

² "The fair races speaking an Indo-Germanic tongue . . . have subjugated the non-Indo-Germanic brown races and imposed their language and civilization upon them."—Professor G. Sergi. *The Mediterranean Race* (quoting Pötsche), p. 9. The appearance of blonds in Africa was very ancient. The so-called autochthonous north African race was blond, says Sergi, p. 63. (It is sufficient that it appeared there at a very early era,—but it was no doubt an immigrant from Asia.—M. P.) The existing blond element in Algeria, Tunis, Morocco, etc., is a descendant of those who erected the megalithic monuments in those countries.—Sergi, *ibid*.

and farther west and built the mighty temple of Baal, the light-god, at Baalbec. One of the stones which were cut but left unfinished still lies at Baalbec, "sealed to its quarry bed on its sixth side." It is called *Bajar-el-Hubla* (Stone of the Pregnant Woman). It is "70 feet long, 14 feet high, 13 feet wide, and estimated to weigh 1,500 tons."³

Lying here in its quarry bed, this gigantic record of megalithic man, interrupted in the midst of his epic work, reminds one of the great "Tired Stones" on the inclined way leading to the altar of Ollantaytambo in Peru. The impression created by the colossal monuments of the megalithic age is that they were the work of a race of supermen,—and it is no wonder that the present-day natives of Baalbec believed that the duplicates of the unfinished stone, which are in the wall of the temple of Baal, had been "lifted there by the jinn of that mighty magician, Solomon."⁴

It is very likely that this earlier race had domesticated the cow and the horse on the plains of central Asia,—had learned to plow the ground with the fork of a tree, carried the arts of husbandry and the herdsman in bold migrations to the west, south, and east, and built its funeral dolmens on the north coast of Africa, as well as in India, Brittany, Scandinavia, and Japan.⁵

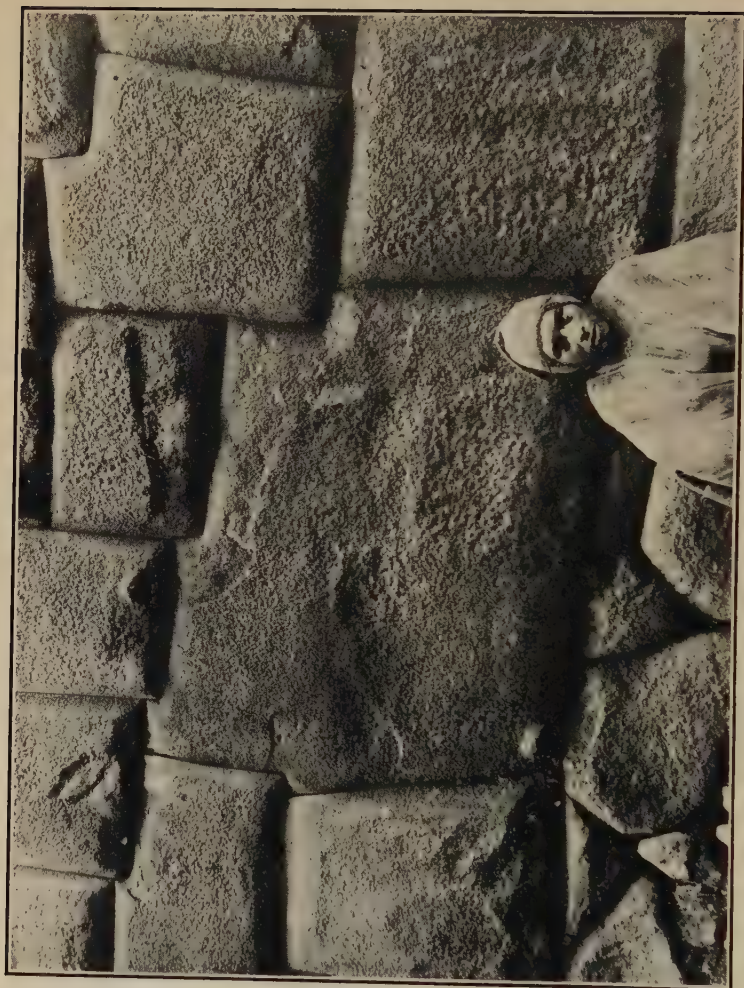
³ Photograph and description by Melville Chater in *Nat. Geog. Mag.*, Dec., 1926, pp. 679-96.

⁴ *Nat. Geog. Mag.*, Dec., 1926, p. 696.

⁵ "The remains of the Later Stone Age show a very much more advanced civilization [than the Paleolithic Age] of a pastoral and later of an agricultural type, with domestic animals, such as cattle, horses, pigs, sheep, and goats. . . . There is some ground for assuming that the earlier flint implements of Denmark were the product of an aboriginal race, gradually ousted and driven north by the Aryans, immigrating with a superior cul-



UNFINISHED ALTAR ON THE "HIGH-PLACE" OF OLLANTAYTAMBO



DETAIL OF PREHISTORIC MASONRY IN CUZCO. "THE STONE OF TWELVE ANGLES."
This is in the wall of a pre-legendary megalithic building. The Inca Rocca occupied it as his palace.

At a later age, no doubt, when this megalithic architecture and masonry had been more highly developed, the influence of Egyptian art was carried to India and China. But it had been preceded by a megalithic culture which reached its highest development in Polynesia and Peru.

The style of construction of the remarkable temples and fortresses of the pre-Incas, such as Tiahuanaco, Sacsahuaman, and Ollantaytambo,—huge stones, the outer lines slanting inwards, the perfect fitting of the stones together without mortar,—the art of quarrying stones of tremendous size, moving them long distances and lifting them into place, has its nearest counterpart in the megalithic works of the Carolines and Rapanui.⁶ The line of march of the great prehistoric race which left these imperishable records of its migrations is plainly marked from south-eastern Asia across the Pacific to the west coast of South America.⁷

ture. . . . The great difference between the culture of the shell mounds and that of the Later Stone Age is the method of disposing of the dead. The dead of the former period, it is assumed, were placed in simple graves in the earth, while characteristic of the latter period are the megalithic graves found in profusion in Denmark and Sweden." Bertha Surtees Phillips, "Scandinavian Civilization," *Encyc. Brit.*, 11th ed.

⁶ Great Rapa, or Easter Island.

⁷ The stone-walled hanging gardens and Cyclopean altars of Peru had their counterparts in Polynesia.

"The ancient Marquesans were skillful as stone-builders. . . . It is not improbable that the ancestors of the Polynesians were familiar with the construction of the stone-faced terraces before their departure from their Asiatic or Indonesian homeland. . . . They challenge admiration as masons, not as architects." Ralph Linton, "Archæology of the Marquesas Islands," *Bulletin Bishop Museum*, XXIII (1925), 5. In the stone structures of the Marquesas stones of from three to ten tons were used. They were moved by the use of levers and rollers. Agricultural terraces were constructed in the Marquesas, and carved stone figures, strongly resembling those in Easter Island and at Tiahuanaco. *Id.*

Truncated pyramids—temples and sepulchers, similar in general type to those in Asia, Mexico, and Peru—have been found on San Cristoval Island. *Polyn. Soc. Jour.*, XXVIII, 39.

The people who inhabited the Carolines, Easter Island, and Peru, at the time of the discovery of these countries by the Europeans, had no knowledge of the builders of these colossal structures nor of the means by which they had been erected.

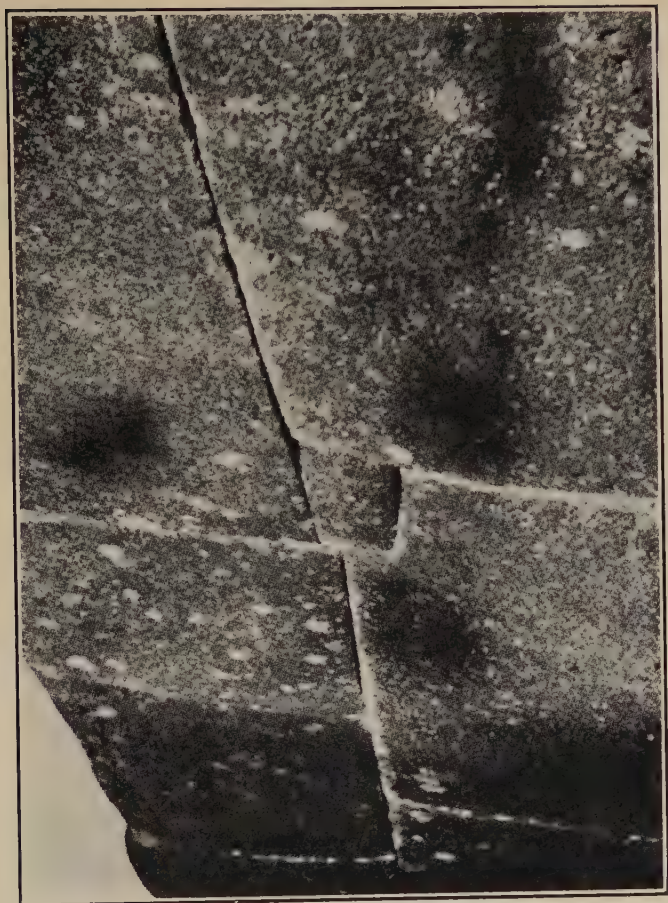
The ahu (temple) *Vinapu*, Easter Island,⁸ much resembles, in the enormous size of its great stones and the beautiful finish of its mortarless masonry, Sacsahuaman and Ollantaytambo. The pose and features of the huge idols which stand at many points on the island remind one of the megalithic idol which still stands in the great quadrangle at Tiahuanaco. According to their own tradition, the Easter Islanders came from Rapa (Oparo), a small island about 2,000 miles to the west on the same latitude,⁹ and this is corroborated by the name they gave to their island,—Rapanui, or Great Rapa.

"In the islet of Lele, close to Kusaie, at the eastern extremity of Micronesia, the ruins present the appearance of a citadel with cyclopean ramparts built of large basaltic blocks. There are also numerous canals, and what look like artificial harbours constructed amid the shallow lagoons.

"In Ponape the remains are of a somewhat similar character, but on a much larger scale, and with this difference, that while those of Lele all stand on the land, those of Ponape are built in the water. The whole island is strewn with natural basaltic prisms, some of great size;

⁸ Mrs. Scoresby Routledge, *The Mystery of Easter Island*, p. 295.

⁹ Megalithic idols and Cyclopean masonry of the Marquesas (photographic prints in *Bulletin Bishop Museum*, XXIII, following page 187) show unmistakable resemblances to those of Easter Island, Tiahuanaco, Cuzco, etc.



"A section of Vinapu, showing how the stones were tooled to plan before being set."

From the "Riddle of the Pacific" by J. Macmillan Brown.

From a tomb in Easter Island. Compare with preceding picture of megalithic masonry at Cuzco.

and of this material, brought by boats or rafts from a distance of 30 miles and put together without any mortar, but sustained by their own weight, are built all the massive walls, and other structures on the east side of the island. The walls of the main building near the entrance of Metalanim harbour form a massive quadrangle 200 feet on all sides, with inner courts, vault and raised platform with walls 20 to 40 feet high and from 8 to 18 feet thick. Some of the blocks are 25 feet long and 8 feet in circumference, and many of them weigh from 3 to 4 tons. There are also numerous canals from 30 to 100 feet wide, while a large number of islets, mainly artificial, covering an area of 9 square miles, have all been built up out of the shallow waters of the lagoon round about the entrance of the harbour, with high sea-walls composed of the same huge basaltic prisms. In some places the walls of this 'Pacific Venice' are now submerged to some depth, as if the land had subsided since the construction of these extensive works. Elsewhere huge breakwaters had been constructed, the fragments of which may still be seen stretching away for a distance of from 2 to 3 miles. Most observers, such as Admiral Sir Cyprian Bridge and Mr. Le Hunte, agree that these structures could not possibly be the work of any of the present Polynesian peoples, and attribute them to a now extinct prehistoric race, the men of the New Stone Age from the Asiatic mainland."¹⁰

¹⁰ "Caroline Islands," *Encyc. Brit.*, 11th ed. The author of this article says: "The Funafuti borings (1897) show almost beyond doubt that Polynesia is an area of comparatively recent subsidence. Hence the land connexions must have formerly been much easier and far more continuous than at present. The dolmen-builders of the New Stone Age are now known to have long occupied both Korea and Japan, from which advanced Asiatic

A curious survival of the megalithic urge and of the so-called neolithic culture seems to persist,—like some strange rudimentary organ that has long since ceased to have any useful function,—in the “stone money” of the island of Yap, “consisting of limestone discs, or wheels, from six inches to twelve feet in diameter and weighing up to nearly five tons,” quarried in the Pelew Islands 200 miles to the south. They “are piled up around about the chief’s treasure house and appear to be regarded as part of his property although it is hard to say what particular use they can serve.”¹¹

lands they may have found little difficulty in spreading over the Polynesian world, just as in the extreme west they were able to range over Scandinavia, Great Britain, and Ireland. To Neolithic man, still perhaps represented by some of the more light-coloured and more regular-featured Polynesian groups, may therefore not unreasonably be attributed these astonishing remains, which assume so many different forms according to the nature of the locality, but seem generally so out of proportion with the present restricted areas on which they stand. With the gradual subsidence of these areas their culture would necessarily degenerate, although echoes of sublime theogonies and philosophies are still heard in the oral traditions and folklore of many Polynesian groups.”

“A smooth round bit of stone on top of the Cromlech of Tonga” is “probably an emblem of some long-forgotten religion.” It almost recalls the crystal divining ball of the Druids.”—A. Hamilton, “Notes and Queries,” *Polyn. Soc. Jour.*, XII, 243, appendix.

“The surprising importance of the Caspian-Mediterranean types in the Gilbert group is, although puzzling, extremely significant . . . The striking part which these peoples played in Polynesia has already been discussed; but whence can they have come? There would appear to be but two alternatives: either we may suppose them to have come from Indo-China by way of Indonesia, into which, as we have seen, a stream of peoples of this type must have passed; or we might derive them from Japan by way of the Bonin Islands and the Mariannes.”—Roland B. Dixon, *Racial History of Man*, pp. 389-90.

¹¹ “How far can these two areas [Peru and Polynesia] of cyclopean stone-work have been related to each other? They were evidently not far off from contemporary in at least their later stages. What was the relationship of Te Pito te Henua, ‘the navel of the earth,’ to *Cuzco*, ‘the navel of the world’? . . .

“Whether it was from the Marquesas or not that the influence of Polynesian great-stone work was directed towards the South American coast, the



MEGALITHS IN THE GREAT QUADRANGLE,
TIAHUANACO

Suggestive of the Sun-temples,—so-called Cromlechs and “Druidical stones,”—of Britain, Brittany, etc.,—such as Stonehenge, Stornoway, Morbihan, Ménéac (Carnac) and others. Cf. illustrations in “Stone Monuments” by Robert Munro, *Encyc. Brit.*, 11th ed., Vol. XXV, facing pp. 962, 964, 965. “Such enclosures generally assume a circular or oval shape. . . . Rectangular enclosures are, however, not unknown.” *Ibid.*, p. 964.

Photograph by the author.



DOLMEN ON ISLAND OF THE SUN, LAKE TITICACA

The tomb has been rifled.

Similar to the dolmens of Western Europe, Northern Africa, etc. Cf. illustrations in "Stone Monuments," by Robert Munro, *Encyc. Brit.*, 11th ed., Vol. XXV, facing pages 904-5. Dolmens "have been traced through Central Asia to India where they are widely distributed." *Ibid.*, p. 905.

The same observations could be made of many of even the most remarkable of the megalithic structures. The huge size of the stones in the fortress of Sacsahuaman was of no strategic value or practical use which could not have been more easily accomplished, and so it would seem to be in the gigantic walls, canals, and fortresses of Polynesia. As in the case of the stone money a mystic value seems to have been attached to the Cyclopean size of the stones, the distance they were moved, and the same value seems to have been attached to the nicety with which the great stones were lifted into their places and fitted together in wall, altar, or royal tomb,—on account of the enormous labor and engineering genius required for these accomplishments, as though it were a token and enduring expression of pride and power.

In most instances a religious element also entered into the work and it was given as a sacrifice and enduring homage to a god or deified king. Neolithic man was capable of deep and refined sentiment and expressed it in this magnificent way,—as in the matchless beauty and simplicity of the unfinished altar of Ollantaytambo, facing the majesty of the sun as it rose in the notch of the Vilcanota.

This great white race, parent of the Aryan stock, left imperishable monuments of its diffusion, its burial customs, religious rites, and some evidence of its industries in

likeness of the cyclopean structures of the two areas is sufficiently apparent. Every feature of Polynesian great-stone work is repeated in the great-stone work of the Andes; and the impetus did not come from America, if we are to judge by the absence of all American products and arts in the Pacific; it must be the other way, as we find purely Polynesian products and methods on the coast of America and evidences that Polynesian warriors swooped down upon the wealthy cities that were approachable by sea.”—J. Macmillan Brown, *The Riddle of the Pacific*, pp. 261, 269.

the dolmens of Brittany, Great Britain, Ireland, Germany, Channel Islands, Crimea, Spain, northern Africa, Circassia, India, Palestine, Arabia, Persia, central Asia, Australia, Madagascar, Peru, Denmark, Korea, Japan, Sweden, and Tennessee; in the cromlechs at Stonehenge, at Tiahuanaco, Sillustani, and Hatuncolla (Peru), and the "alignments" of great stones at the base of the Pyrenees, also in Cornwall, and in Carnak (Brittany).¹²

The dolmens were used as altars as well as sepulchral monuments; and sacrifices were offered upon them. "In the mounds surrounding the tombs animal bones and shells are frequently found, indicating feasts and sacrifice. It seems as if many of the graves, especially in Sweden, had at some time been considered as places for sacrifice, to judge by the saucerlike hollows constantly found on the upper side of the covering stones."¹³

At Sillustani in Peru there are remarkable cromlechs or sun-circles. "On this [natural terrace]," says Squier, "we find a number of circles and semicircles of varying diameter (90 to 124 feet) defined by a platform of well-fitted flat stones inside of which is a line of erect uncut stones so nearly coinciding in every respect with what are called the sun-circles or Druidical circles of England and many parts of northern Europe and Asia as to be scarcely distinguishable from them."¹⁴

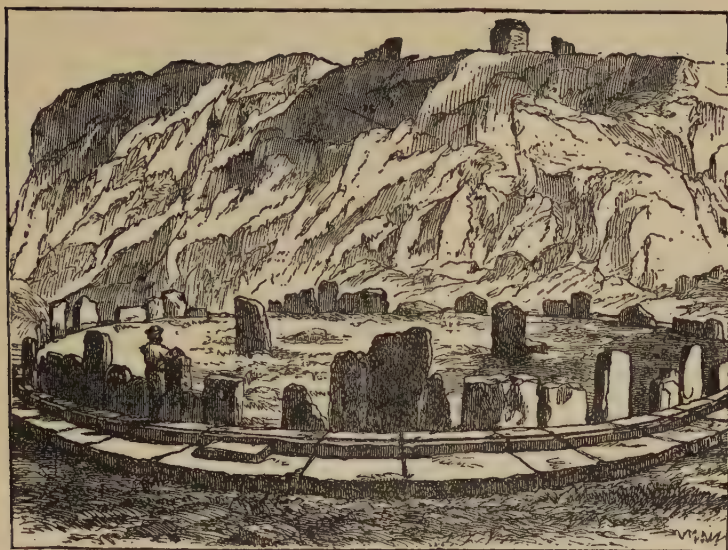
¹² Robert Munro, "Stone Monuments," and Bertha Surtees Phillpotts, "Scandinavian Civilization," *Encyc. Brit.*, 11th ed.

The first of these authors opposes the idea that these tombs were ever used as altars; the second advocates it. On account of primitive man's worship of the spirits of his ancestors, it is certain that the dolmens were of a sacred character.

¹³ Bertha Surtees Phillpotts, *ibid.*

¹⁴ E. George Squier, *Peru: Incidents of Travel and Exploration in the Land of the Incas*, p. 383.

The custom of the Quichuas and Yungas (Indians of the coast) in Peru of burying their distinguished dead in the temples is still practiced by us. The worship of the



SUN-CIRCLE, SILLUSTANI

From "Peru: Travel and Exploration in the Land of the Incas," by E. G. Squier (London, 1878).

Mr. Squier says: "The stones forming what I have called the platform are roughly cut and their adjoining edges are on radii from the center of the circle. The inner ends are highest, and through them runs a groove or gutter, extending all around the circle. Some of these circles are more elaborate than others, and of one of these I give a drawing that will serve to illustrate all. It will be observed that there is, first, a circle of rough, upright stones, of irregular sizes, firmly set in the ground. The circle is 124 feet in diameter; it has an opening 5 feet wide on the east, and it encloses two larger upright stones (one of which has fallen), placed one-third of the diameter of the circle apart. The stones on both sides of the gateway are pierced with holes."

dolmen builders on the altars of their dead is followed by the English in Westminster Abbey. The practice of having sepulchers in our churchyards and crypts for the dead in our great cathedrals is only a natural survival of the

religious significance attached to death and burial by our ancestors of the neolithic age. Millions of Christians, as well as of other believers, still worship the spirits of the dead in much the same manner as prehistoric man.

On the other hand the founders of Peruvian civilization also worshipped, as we do, an unseen and omnipotent God and believed that he had manifested himself on earth in the flesh for their salvation.

We still actively practice the culture of our neolithic Paleo-Aryan ancestors in the erection of stone monuments. The family vaults in our churchyards are but modern dolmens or *chulpas*, and the stone shafts over the graves of our relatives or great leaders of the people are but menhirs,—more highly finished but not always so impressive as the great megaliths of Brittany or Peru. The deposit of the dead in caves as by the ancient Israelites, the Hawaiians, the Quichuas of Peru, and many other ancient peoples was but an early form of the crypt-burial still practiced by civilized races, descendants of the Paleo-Aryan stock. Many of the monumental tombs of the Peruvians, such as that at Cuelap in the Cordillera of northern Peru, and the great pyramids on the coast, were sacrificial altars and temples as well as sepulchers.¹⁵

In the more highly finished masonry and architecture of the Golden Age of Peruvian civilization, the burial vaults took the form of circular towers called *chulpas*, with elaborately carved cornices and stones fitted into the curving walls with the utmost geometrical accuracy. Many of these *chulpas* exceeded in artistic beauty our modern marble burial vaults.

¹⁵ Some of them, like the medieval castle of Cracow, and other European strongholds, served the combined uses of a temple, a fort, a palace, and a tomb.



Prehistoric royal tomb, or "chulpa," at Sillustani, on the shores of Lake Umayo, near Lake Titicaca. The masonry has been cracked by an earthquake.



ÁYMARA CHULPA (TOMB) NEAR LA PAZ

XXII

PREHISTORIC WHITE VOYAGERS IN THE SOUTH PACIFIC

"THE original home of the Tibeto-Burman race seems to have been on the Upper Hwangho and the Upper Yangtze-kiang in the Chinese provinces of Sze-ch'uen and Yünnan. The oldest invaders followed the Tsangpo into Tibet and became the Tibetans of the present day. Other hordes crossed the Brahmaputra and settled in the hills on the southern slopes of the Himalaya range. From the headwaters of the Irrawaddy and the Chindwin successive waves entered Assam and Further India. Some followed the course of the Brahmaputra and settled in the hills to the south and east of the great bend of the river. Others entered the Nāgā hills, while numerous tribes must have followed the Chindwin into Manipur and the hills to the south. The inhabitants of Burma have probably come down along the Chindwin and the Irrawaddy, and the latest immigrants, the Kachins, have only in modern times begun their wanderings southwards through the hills."¹

"At some date long anterior to history it is supposed that Indo-China was occupied first by a fair Caucasian people and later by a yellow Mongolian race. From these two have come all the peoples—other than Negrito

¹ Sten Konow, "Tibeto-Burman Languages," *Encyc. Brit.*, 11th ed.

or Papuan—found today from the Malay Peninsula² to the farthest islands of Polynesia. The Malay Archipelago was thus first invaded by the Caucasians, who eventually passed eastward³ and are today represented in the Malay Archipelago only by the Mentawi Islanders. They were followed by an immigration of Mongol-Caucasic peoples with a preponderance of Caucasian blood—the Indonesians of some, the pre-Malays of other writers—who are today represented in the archipelago by such peoples as the Dyaks of Borneo and the Battas of Sumatra. At a far later date, probably almost within historic times, the true Malay race, a combination of Mongol and Caucasian elements, came into existence and overran the archipelago, in time becoming the dominant race.”⁴

The second migration described by Jayne, of mixed

² Malaya is probably but a contraction of Himalaya,—meaning, when applied to the race, people of the snows (or from the northern snow-covered mountains).

³ “It looks as if this simple primeval language [the Polynesian] came in with the first comers in the old stone age, the Potteryless migration, that alone brought women to the Central and Eastern Pacific.”—J. Macmillan Brown, “Languages of the Pacific,” *Bishop Museum Occasional Papers*, VII, 29.

Speaking of aboriginal racial types in Asia, Professor Roland B. Dixon, after mentioning the “Proto-Australoid” and “Proto-Negroid,” says: “Two other types were also present. Probably the earliest of these was the Caspian [Caucasic], which at a very early period had spread throughout most of the northern lowland and had forced its way across the eastern plateau to Farther India and the eastern coast. Sweeping through Dzungaria and over the upland, they came into China and Manchuria and passed by way of Korea into Japan, where their presence in Neolithic times has been recently established. Another branch seems to have followed down the great rivers and mountain ranges which spread fan-wise from eastern Tibet, so penetrating into Farther India, from whence they passed on into Indonesia and the Pacific. The effects of this great early thrust of the Caspian peoples toward the east and southeast may still be traced in parts of the borderlands today, where individuals of strikingly European features, with light hair and eyes and rosy cheeks, are sometimes found.”—*The Racial History of Man*, New York and London, 1923, pp. 243-44.

⁴ K. G. Jayne, “Malay Archipelago,” *Encyc. Brit.*, 11th ed.

Mongol and Caucasian stock, was probably that from which came, through several centuries, the expeditions in Polynesia whose chronology Quatrefages and others undertake to give. Preceding that was the earlier movement of antique Caucasian stock, who left behind them on the mainland their characteristic megalithic records. This, in all probability, was the powerful and daring prehistoric people which erected by the labor of slaves⁵ the gigantic megalithic structures of the Carolines, of Easter Island, and of Peru, probably some three thousand years before the Christian era.⁶

Among other traces of the kinship of the Polynesians with the Indo-Aryans are peculiarities in the organization of the clan and the relationships of the family. Among the Indo-Europeans "the uncle and aunt are a second father and mother to the family and for this reason *nepos*,

⁵ E.g., the *Menahune* people,—Negritos of Hawaii, who worked for the Polynesians. Also *Manahune*, serfs in Tahiti. S. Percy Smith, *Polyn. Soc. Jour.*, XXX.

⁶ The Polynesian language is "fundamentally Aryan of pre-Vedic type before the inflections were fully developed or generally adopted."—Abraham Fornander, *Polynesian Race*, Preface, Vol. II.

Professor W. D. Alexander of Punahau College, Honolulu (Fornander's *Polynesian Race*, Preface, Vol. III), admits that "a strong case has been made out" for the "existence of an Aryan element in Polynesian," and says that Fornander believes that he has "tracked the footsteps of the first Polynesian emigrants still farther into the highlands of Southwestern Asia and revealed the impress of the ancient Cushite civilization in their religion and customs." Alexander cites both the illustrious Professor Bopp and Wilhelm von Humboldt as holding "that there was a second class of Sanskrit words extending to remote districts such as the Togala, Polynesia, and Malagasy." The wide diffusion of these words Humboldt attributed "to an older form of the Sanskrit or a 'pre-Sanskrit' language."

Polynesian legends tell of their origin (in the very beginning) in a white race. Fornander, *Polynesian Race*, II, 1. Fornander cites Horatio Hale of the United States Exploring Expedition as allowing 3,000 years for the distribution of the Polynesians from the Samoan group among the islands now inhabited by them.

Skt. *napāt*, is both nephew and grandson.”⁷ Likewise in Polynesia “the only names used to express particular relationships are father and mother, son and daughter, brother and sister. There is usually no distinction between brothers (or sisters) and cousins, all the children of brothers and sisters speak of each other as brothers and sisters, and they call uncles and aunts fathers and mothers.”⁸

Easter Island lies at 27° 8' South Latitude, well out of the westward-flowing current of the mid-Pacific. Canoes putting out from there towards the east would not be impeded by that contrary stream, and would soon be caught in the western extension of the great cold current flowing to the north, known, as it breaks on the west coast of South America, as the *Humboldt* or *Peruvian* current. They probably would have passed north of Mas Afuera and Juan Fernandez (Robinson Crusoe's Island). The small islands of St. Ambrose and St. Felix lie in their way to the east and would have afforded a place for rest and recuperation; though there was but a meager chance that these specks would be sighted in the illimitable waters. At 18° South Latitude the coast line of the continent turns sharply at an angle of 45° to the west; so that canoes coming from the west, as they approached the continent, would have an unbroken line of land to the north as well as to the east.

These early men were among the greatest, perhaps the very greatest, navigators, considering their meager equip-

⁷ Peter Giles, “Indo-European Languages,” *Encyc. Brit.*, 11th ed., citing Adolphe Pictet, *Les Origines indoeuropeennes ou les Aryas primitifs*.

⁸ “Polynesia,” *Encyc. Brit.*, 11th ed.

ment, in the history of man's voyaging upon the sea. This is shown by their discovery and settlement of the islands of Polynesia. They knew the stars, the winds, the currents of the ocean. On their voyages the rain supplied them with water and the sea with food.⁹

As they neared the unknown land their drift would be to the north and it is not unlikely that this brought them in sight of the coast of the great continent near the point where the swing of the coast line to the west brought it across their line of approach.

As their canoes followed shoreward the long swell of gray waters in the broken lights and shadows, where banks of clouds were blown northward by the trade winds over the Humboldt current, what must have been the emotions of these sea-worn voyagers in the climax of their great adventure as they saw far off and high in the heavens, like white cloud-masses above the amethyst haze, the snowy summits of the Andes? Possibly Tutupaca, or the far-off resplendent array of the triple peaks of Arequipa, like a vision of the Apocalypse, was their first sight of the new world!

Probably at some patch of vegetation, enlivening with its green by the mouth of a mountain stream the barren

⁹ "Here we find them [the Polynesians] boldly pushing out into the great unknown ocean in their frail canoes, actuated by the same love of adventure and discovery that characterizes our own race. Long before our own ancestors had learnt to venture out of sight of land, these bold sailors had explored the Antarctic seas and traversed the Pacific Ocean from end to end."—S. Percy Smith, "Hawaiki—the Whence of the Maori," *Polyn. Soc. Jour.*, VIII, 11.

The same writer (*Polyn. Soc. Jour.*, VIII, 34) cites the Rarotongan history (tradition) of the voyage of the old chief Tangiia to Rapa (Rapanui, Easter Island) "dead against the trade wind and 4,200 miles in length," to fetch Tai-te-ariki to be *ariki*, or chief of his people, his own "sons being dead."

line of black rocks and yellow sand of the desert coast, these migrants from Asia, or of Asiatic descent, drew their canoes ashore. What a fancy to picture those tall white men with their women and children as they stepped ashore!

They were representatives of a mighty race. The power and character displayed in the features of this distinctive stock of men appears in a few of the ancient pottery figures from the vicinity of Lake Titicaca,—and strange survivals demonstrating the persistency of the heredity of strong types through many ages may occasionally still be encountered among the native full-blood Indians of the Peruvian cordilleras.

The remains found in the majestic sepulchers of Cuelap in northern Peru were of people with red hair and a stature of six feet or more. On various occasions I have seen red hair of fine texture on mummies taken from the graves of Pachacamac and the great tombs on the road to Bellavista near Lima. Even as late as the time of the Incas the beautiful Quichua drama, *Ollantay*, describes the tresses of the princess as “black mixed with gold, just as the plaited hair of an Inca princess is represented in an ancient picture at Cuzco. . . . The Inca princesses, as we know from some ancient pictures and descriptions, were much fairer than the common people.”¹⁰

The process of absorption of the white Aryan immigrants by the more numerous dark indigenous people in India, in Malaysia, and Polynesia, was continued in America until in the slow action of centuries but little trace

¹⁰ Sir Clements R. Markham, Introduction to Cieza de Leon's *Chronicle of Peru* (Second Part), Hak. Soc., p. xlvii.



"LA VIRGEN INDIA, THE HIGHEST TYPE OF ANDEAN
MAIDENHOOD"

"In this group the sculptor has depicted the flower of Andean womanhood, her grace and beauty, her authentic physiognomy, and the spirit of the Quichua race. The juxtaposition with perhaps the most femininely graceful of the Andean fauna completes this simple but beautiful poem in marble."

*Sculpture by the Spanish sculptor, Ramon Mateu. From
"Bulletin of Pan American Union," December, 1927.*

was left of the blood of the conquerors. Nevertheless, in China, in India, in Polynesia, and in Peru, there are even yet unmistakable evidences of the Aryan mixture.¹¹ As the Aryans were the dominant race it is among the ruling classes that their blood has been longest preserved.

The process is now being repeated in the later Aryan invasion by the Gothic Conquistadores from Spain, whose racial blood had already been subjected, before they left Europe, to the same universal process by the infusion of the Moorish stream. The amalgamation of the conquering Spanish with the dark indigenes in varying degrees in different parts of Latin-America is but a reenactment of the experience of another branch of the same basic race on the same theater in prehistoric times; with the difference that the white race has now come in much greater numbers with greater reinforcements and resources, and more constant lines of communication.

In what numbers the earlier immigrants came, how they acquired their mastery in the new land beyond the "eastern seas,"—whether by war or strategy or merely by superior culture or by the mystic influence of a new religion and by teaching men the arts of civilization, and how much time elapsed before the new leaders acquired the power to erect the megalithic fortresses and temples,

¹¹ "The Hawaiian chief, Paumakua, is credited with having sailed around the Pacific world on more than one occasion, and on his return from one of these voyages is said to have brought with him two white men."—Lieutenant-Colonel Gudgeon, *Polyn. Soc. Jour.*, XI.

Turehu,—"fair or white people,"—were conspicuous in Polynesian tradition. These white people were evidently a different race from the later Polynesians' own white ancestors,—with which they had come in contact at some point of their migrations. S. Percy Smith thinks they were located on the eastern coasts of India.

the stone-faced terraces climbing the mountain-sides of the Vilcanota,—we cannot tell.¹²

The tradition still survives of the god who came as a white man and taught the people the principles of social order, gave them their religion, taught them to till and irrigate the ground, to weave, to make implements of bronze and ornaments of gold and silver. They called this god Viracocha.¹³

“These fragments, broken chips from a great wreck, have at last reached us. We know from them that, in their inmost hearts, the intellectual and more instructed

¹² “It seems almost inevitable that the main features of the Polynesian tongue, especially the sound-range and the sound-laws, go back to the old stone age in Europe. In that case we must conclude that the Aryan language started on its career some twenty to twenty-five thousand years ago and that philological students of the Latin and Greek and the modern European languages must study Polynesian in order to see the type from which these sprung and the final analysis of their words and roots.

“This long period of time is necessary to explain the vast extent of the earth over which first Indo-European had to spread even before our era, and the still greater extent over which Polynesian elements have spread. Both have more than half circled the world, and if the two are one, we have the most extraordinary language that the world has seen, and out of the divisions of it English is drawing towards becoming as nearly the universal language as one language can ever be. It is a great thing to have for one’s language one of a type that has, as Polynesian has, traveled across half the world by land and then doubled back as far by sea.”—J. Macmillan Brown, “Languages of the Pacific,” *Bishop Museum Occasional Papers*, VII (1918), 15.

This able philologist on a *non sequitur* deduction from the fact that the recently discovered Tochari Indo-European language of Chinese Turkestan had the *k* sound, the same as the European group of Indo-European languages, expresses the opinion that the Indo-European tongues originated in Europe.

Denison (*Mex.-Aryan Phonology*) claims that the Nahua, or, as he designates it, the Mexican language, is more ancient, as shown by its vowel system, than the Sanskrit.

¹³ *Illa Tici Uira-cocha*,—“The creator and ruler of the Universe.” Compare the Chinese Virudhaka, G. E. Smith, *Elephants and Ethnologists*, p. 43. The hymns of the Incas to Viracocha resembled the hymns of the Indo-Aryan Rig-Veda and the Psalms of David. Markham, *The Incas of Peru*, pp. 41, 97, 100-103.

section of the Incas and their people sought for a knowledge of the unseen creator of the universe, while publicly conducting the worship of objects which they knew to be merely God's creatures." The Amautas,—the caste of learned men, the Peruvian Brahmins,—thought of the supreme god as a spirit; but the masses of the people conceived of Viracocha in the form of a white man.

When the Spaniards came thousands of years later, with new and wonderful but more destructive arts, they were called by the Indians Viracochas. Finally the name came to be the cordillera Indians' colloquial term for any white man. In both instances the white man brought the conception of the Aryan god. As elsewhere, the Spanish chief claimed to be the god's avatar; the priests, his representatives; and the native tradition confounded the superior man with the god.¹⁴

¹⁴ "Dr. Henry L. Shapiro, of the American Museum of Natural History, returned yesterday from a ten months' expedition to the islands of Eastern Polynesia, during which he endeavored to trace the racial origin of the tribes of the Society, Marquesa, and Tuamotu Islands. . . .

"'Anthropologists have long suspected a Caucasian element in the Polynesian racial complex and the natives of Fagatau clearly proved its existence,' said Dr. Shapiro yesterday." *New York Herald Tribune*, February 21, 1930.

XXIII

THE SURVIVAL OF ABORIGINAL CAUCASIAN STOCK IN THE SOUTH PACIFIC

AMONG the ruling people with whom the megalithic immigrants from the South Seas came in contact as they explored the new land were branches of their own Paleo-Aryan race which had come to America by other routes. Many tribes had reached Peru from the north. No doubt many expeditions followed them,—to be fused with mongrel immigrants and earlier stocks of Ural-Altaic extraction,—leaving confused myths of “beasts, gods, and men” in the mixture and diffusion of their varying cultures.¹ Ancient myths took new forms in the dramas of tribal wars, invasions, folk-movements, and the varied environment of the great continental stage.²

Even thousands of years after the landing of megalithic man in Peru, at the time of the first European dis-

¹ “In the marshy areas where the San Lorenzo flows into the Paraguay,” there lives “the unique tribe of Guato Indians with Caucasian features. The men have bushy beards.”—Max Schmidt, *Primitive Races of Man-kind*, pp. 240-41.

² “The ancient mariners who made their way into Polynesia discovered and settled in almost every islet on that vast expanse of the ocean. The widely scattered islands were discovered either by accident or as the result of deliberate exploration; and we know sufficient of the traditions of the peopling of the Pacific to be certain that both factors played a part in the process. Is it at all likely that seamen who wandered as far as Easter Island, Hawaii, and New Zealand refrained from going farther east? Is it not certain that for each boat which chanced to reach Easter Island, a microscopic speck in far eastern Polynesia, there must have been hundreds, if not thousands, that missed it and passed on to the American coast?”—G. E. Smith, *E. & E.*, p. 106.

THE FLEET OF OTAHEITE ASSEMBLED AT OPÁREE

Captain Cook himself states that Mr. Hodges' pictures are accurate and render lengthy description unnecessary. No doubt the pictures do convey a vivid and correct impression of the style of these canoes. However, by reason of Mr. Hodges' indifference to perspective and proportion, they undoubtedly appear smaller than they actually were as given in the detailed plans and measurements published by Captain Cook and those of even larger canoes verified by other writers. In a picture of one of the islands Mr. Hodges, apparently in order to animate the scene, has a bird perched on a mountain, which is larger than the mountain. His human figures in the canoes are likewise out of all proportion in size to the canoes, as is evident from the fact that many of these great vessels carried 100, 200, or some of them even as high as 300 people.

Opposite page 344 (*Voyage Towards the South Pole*, Vol. I) Captain Cook gives the dimensions of one of the Tahiti double war canoes: "From out to outside, 14 feet, 3 inches; length, 108 feet; depth below deck, 6 feet."

A fleet of these war canoes was assembled at Opáree at the time of Cook's visit, preparatory to a war expedition. "We knew of no more than 210 besides smaller canoes to serve as transports, etc., in the fleet of Tiarabou, the strength of which we never learnt. . . . If we suppose every district in the island, of which there are forty-three, to raise and equip the same number of war canoes as Tettaha, we find by this estimate that the whole island can raise and equip 1720 war canoes."—*Voyage Towards the South Pole*, Vol. II, pp. 344-9.



THE FLEET OF OTAHEITE ASSEMBLED AT OPÁREE

*Painted by W. Hodges,
From "Voyage Towards the South Pole," by Captain James Cook,*

(See reverse side for description)

coveries in Polynesia,—the great white race which had built its monuments in those islands³ had not been entirely obliterated by the fusion of its blood with Mongol and Melanesian, though the Polynesian race in general had become a hybrid, with merged traces of the white, yellow, and black of which it was a composite.⁴

In 1606 Quirós, setting out from Lima, the first European to visit Tahiti, saw in that island a red-headed chief. On rediscovering this island in 1767 Wallis found there some individuals with red and some with blond hair; and he states that the children of both sexes were ordinarily blond. His visit was at a time when the presence of these white people in Tahiti is not likely to have been the result of contact with Europeans. In 1560 Mendoza and Mendozaña observed red- and blond-haired people even in the Solomon Islands in the midst of black populations. Quirós observed the same in the New Hebrides. (Quatrefages, *ibid.*, pp. 10-11.)

On the island of Timor, a little north of the western

³ "Long after the Aryans had taken possession of the Indian plain, a Prakrit-speaking fair race from the two Indias came to occupy the chief islands in Indonesia, driving the black aborigines into the mountains. . . . They intermingled, but the brown Polynesians are mainly Caucasian in physique and character."

The author cites as proof excellent portraits of Moriori (Chatham Island) people, published in the *Polyn. Soc. Jour.*, III, 76, 187. These pictures show a white, handsome, strong-featured, typically Caucasian type. "In more recent centuries,—in the Christian era,—a Mongolian race came into Indonesia and drove their white predecessors eastward and northward."—John Fraser, LL.D., "The Malayo-Polynesian Theory," *Polyn. Soc. Jour.*, IV (1895), 241.

⁴ "In general the black type is the weakest part and has scarcely left any trace in the population. The yellow and white types divide the supremacy and from that come two great groups to which can be given the rank of *families* in the classification. The first of these groups constitutes the *Malaysian family*, the second the *Polynesian family*." Quatrefages, *Les Polynésiens*, p. 13.

part of Australia, Earle found the aborigines in the northern part of the island "fairer than the Polynesians in general. . . . Some of them have red hair." Crozet thought the whites were the indigenous people of New Zealand.⁵

The present writer saw in 1917 in Honolulu full-blooded Hawaiians of pure Polynesian stock, both men and women of high caste, of typically large handsome physique, characteristic of most of the Polynesians, who were entirely white, as fair-skinned as the average northern European. Their eyes were brown; their hair dark with an auburn tinge. The earlier explorers noted that the chiefs and nobility were fairer than the lower classes, and that this was due not only to a different mode of life (for they also were much exposed to the sun) but to racial differences and purer white blood. Their caste was protected against mixture with the black and yellow lower classes with the utmost rigor and even cruelty,—as in India and Peru.⁶

In Paques Island in 1772 Roggeween, a Hollander, found among the mixed population individuals who were "entirely white," and in Bauman Island, he says, "the inhabitants are all white, not different from our Europeans."

In New Zealand in 1772 Captain Marion found people "of the color of South Europeans," and several with red hair.

⁵ Quatrefages, *Les Polynésiens*, p. 17, quotes Crozet as follows: "It is certainly surprising that we have found in this extremity of the earth in islands not known to this day, without communication with the world, three species of men,—white, black, and tawny or yellow. To all appearances the whites are the indigenous people."

⁶ Quirós; Wallis; Quatrefages, *ibid.*, pp. 10-11.

It is quite significant that the Paumotans in the eastern rim of Polynesia, where the original race has been less subject to more recent infusions of the black and yellow, are the lightest-colored of all the Polynesian people.⁷

⁷ Quatrefages, *ibid.*, p. 11.

"There is a general consensus on the European-like features and color of many of the natives of Easter Island. And the faces of the images confirm this Caucasoid impression; they are oval, straight-nosed, large-eyed, thin-lipped and short in the upper lip, the features that distinguish or are supposed to distinguish the highest ideal of beauty of the northwest of Europe. There are also many indications of a blond race having penetrated into Polynesia. There is the story, in at least all the larger areas in which there were refuges for a defeated people, of a golden- or red-haired race that, crossing with some of the conquering immigrants, have left the *urukehu*, or light-haired families and children. Moorea, the island opposite Papeete, was of old called 'the island of fairy folk with golden hair.' In Hiawaii they worshipped Cook as their golden-haired god *Lono* returned to his original home, and the priest led him with high ceremonial and offerings to the great stone truncated pyramid that was the temple of the god. In New Zealand the *Turehu*, a light-haired aboriginal race away up in the mountains of the Urewera country, crossed with the immigrants and so left numbers of *urukehu* in that region. But it is the *Patupaiarehe* that are especially referred to as the purest of the blond-haired races; and Mr. James Cowan has shown in the June and September numbers of the *Journal of the Polynesian Society* for 1921 that the wise men of the *Ngatimaniapoto* tribe have traditions of this fair-skinned people having lived in the fatherland Hawaiki. In the September number he tells how one of the *Patupaiarehe* called *Tarapikau* [Note the Peruvian *Tarapacá*. M. P.] still guards their sacred places on Mount Rangitoto, and how any Maori trespassing in them sees their red-haired pigs or their red flax or their red eels in the streams and is carried off to the top of the mountain. Red is their distinctive color, the term generally applied by Easter Islanders to Europeans. . . . And still can one see in the village [on Easter Island] fair skins as well as dark, and children that have bronzy hair and almost blond complexions. And, as I pass native girls, with the sun shining through their hair, there is a glint of reddish-brown in it; and in the village there is a family that is completely red-haired.

"And thus in physique, in hair and features and complexion Easter Islanders show affinity with Polynesia, are in fact Polynesian."—J. Macmillan Brown, *The Riddle of the Pacific*, pp. 236-37.

XXIV

OUR PRE-COLUMBIAN KINSMEN IN AMERICA

THE ruling caste of the Mayas, Quichuas, and their related races, the leaders who developed the remarkable ancient culture of America, were an eastern branch of our own ancestral stock changed almost into a new race by mixture with the "dark peoples" with whom they had come in contact in their long migrations and especially by the constant process of amalgamation, after their arrival on the American continent, with the mass of the darker indigenous people who had come to America before them, notwithstanding the rigor with which the law of caste, —based originally on color as in Indo-Arya and Polynesia¹ and intended for the preservation of the superior white race,—had been enforced.

Even earlier migrations which had come from the north,—immigrants whose forebears had crossed from Asia, perhaps in the course of many generations, by the chain of Japanese and Aleutian islands and the Alaskan peninsula, or further north by Bering Strait,—bore evidences of contact and mixture with strains from this same original Parent-Aryan source. The white Ainus of the mountains of northern Japan are probably a degenerate remnant of the same stock.² A different and more for-

¹ Quatrefages, *Les Polynésiens*, p. 10.

² "Who were the Anuts who are known to the Lele islanders, by tradition, as the builders of the Cyclopean enclosures, with walls twelve feet in thickness; who are also credited with having made the stone-faced canals on



DESCENDANTS OF THE ANCIENT QUICHUA RACE, OLLANTAYTAMBO



tunate branch are the whites of the high-class ruling caste of Japan.

This great white race, kindred of our own, whose mixed descendants in America spoke, even at the time of the arrival of the Spaniards, a language which still contained many traces of our Paleo-Aryan mother tongue, was moved by much the same incentives in its great migrations as led our English ancestors to America and spurred on our American fathers to people the West. Many of their words were the same as the English inherited by us from the common ancestral source.⁸

The lure of land and treasure was the motive of their enterprise. They were farmers, herdsmen, miners, and pearl fishermen. The rich new lands and pleasant climate of the highlands of Mexico, Central America, and Peru had the same attraction for them that the Iowa prairies and the valleys of Oregon and California had for the American pioneers.

The pearl fisheries of Polynesia afforded one of the principal inducements which drew the early Aryan adventurers in their marvelous voyages from island to island in the course of centuries across the trackless wastes of the Pacific. The mines of copper, tin, and gold of Peru, as well as the agriculture of the delightful Andean valleys, attracted immigration from the north; and, when considerable culture had been attained by the Mayans and Toltecs, prospectors, merchants, miners, engineers, builders went

Ualan, Ponape, and other islands in the western Pacific, and who are said to have been sea-rovers, owning immense canoes in which they made voyages of many months' duration?"—Lieutenant-Colonel Gudgeon, *Polyn. Soc. Jour.*, XI, 188. Cf. this reference with the white Ainus of Japan.

⁸ *Infra*.

from the centers of culture in Central America and Mexico in search of fresh-water pearls, which were abundant in the streams of the Mississippi valley, and to work the great copper mines on Lake Michigan,⁴—just as the discovery of gold attracted the “Argonauts” to California.

The suggestion is made⁵ that the bulk of the population was Indian, of the same type as when Columbus came, and that the Mayan “promoters, captains, and engineers,” with their maize and scientific knowledge of agriculture, irrigation, astronomy, medicine, etc., were looked upon as magicians and as such controlled the labor of the indigenous population.

Many of the earthen mounds of the Mississippi Valley

⁴ In *Literary Digest* for Oct. 24, 1925, p. 25, there is described a mound excavated near Bainbridge, Ohio, in which were discovered four skeletons of “great” men,—two of them with copper helmets. “The graves contain a great profusion of pearls, some of them reported to be as much as a half inch in diameter. . . .

“From what country did these rulers come? In all probability, thinks Dr. Free [E. E. Free, editor of *Scientific American*] they came from the great Empire of the Mayas. . . .

“Why did they come? It is suspected, he says, that they came as adventurers and mining engineers, as merchants. They were seeking gold and copper, turquoise and mica, and pearls,—always and everywhere the pearls.”

Dr. Free is quoted as saying: “Professor W. J. Perry, the distinguished British anthropologist, is chiefly responsible for the suggestion that in the mussel beds of the streams of eastern North America was one of the great pearl fisheries of the ancient American world.”

They felt the same urge as the miners and gold seekers who settled Alaska and Montana. G. Elliot Smith (*Elephants and Ethnologists*, p. 75) suggests that pearl and mother-of-pearl fisheries were the chief incentive of the Polynesian voyages.

“*Varuna* was the (Indo-Aryan) god of water and ocean; he wore a necklace of pearls, carried a conch-shell and a lotus, and was, according to Professor Bhattacharya, equipped with a net or rope such as is used by pearl fishers.”

⁵ E. E. Free, *New York Times*, cited in *Literary Digest*, *supra*.

region were exactly similar to some of those about Lima and in various parts of China and England.⁶

No doubt the search for religious liberty, the establishment of a new cult, the desire to worship their gods according to their own beliefs and to escape from the bigotry and intolerance of the priests, led to many early migrations, just as similar influences swayed many immigrants to the English colonies in America. It is very likely, as in the case of our New England and Maryland colonists, that religious bigotry sprang up often in their new home and added its incentive to those of war, conquest and plunder in bringing about new migrations.

As usual civilization was developed and arts flourished in the temperate zone, and, in this case, especially in a zone which had a temperate climate throughout the year, and more especially in regions which required irrigation. The desperate struggle of the Eskimos, for example, for a bare subsistence amid the bitter cold and barren ice-fields of the Arctic, left no time or opportunity for art except such as administered to their elemental and imperious needs for food and warmth; while the continual summer and profusion of the tropics, where there was an abundance of rainfall, made mere existence so easy that it destroyed the incentive necessary for exertion and prevented the operation of the great law of the survival only of the fittest which makes for mental development.

In the valley of Mexico, on the coast of Peru, along the

⁶ The great "round barrow" of Silbury (*Downland Man*, by H. J. Massingham, p. 108) has its counterparts in the Ohio valley. All were tombs of chiefs, like that erected near Tokio over the body of the late emperor, Yoshihito, or at Bainbridge, Ohio, over the four lords,—tall men with copper helmets and adorned with great strings of large pearls. (*Literary Digest*, *supra*.)

beautiful streams of the middle altitudes of the Andes, the culture of America had reached its highest development and long since begun its decline when it was struck by the withering blast of the Spanish conquest. There the air was sufficiently cold to give health and vigor to the human frame,—and yet warm enough to reward his efforts in the cultivation of the soil. No more delightful abiding places can be found in the world, but, as in most of these regions the soil is so dry that it will produce no crops, or only insufficient crops, without irrigation and intensified cultivation, man's existence there depends on his industry and ingenuity.

By the operation of this natural force of necessity, man, on the plains of Anahuac, and in the enchanting valley of the Vilcanota, reached his highest state of culture on the continent. In Peru, in his matchless terraced and watered gardens, with his sixty-five varieties of cultivated plants, he carried agriculture to the highest point of science and refinement it has ever attained.⁷

“In estimating, therefore, the physical conditions by which civilization was originally determined, we have to look, not merely at the exuberance, but also at what may

⁷ Lord Bryce (*South America*, p. 156) was mistaken in his view that the “primitive Celts and Teutons stood high above the ancient Peruvians as to imagination and beauty of abstract things.” The Inca caste which ruled the Quichua and Aymará empire,—the caste which descended from the common Proto-Aryan ancestors of the kingly and Brahman caste of Indo-Aryans,—had retained and developed, along with a more material and more popular worship of the sun, the supreme Brahman conception of an omnipotent and spiritual God (whom the Incas called Viracocha), creator and ruler of the universe,—a spiritual essence from which all things come, and to which, in the end, all things will return. The Amautas, or learned men, of the Incas were masters of much of the Indo-Aryan transcendental philosophy, though it was by no means so profoundly developed in Peru as in India.



ANCIENT VILLAGE AT THE BASE OF THE TEMPLE OF
OLLANTAY

The houses in view here are mostly Spanish-Colonial. In the background are the ruined terraces of the ancient temple.

be called the manageability of Nature; that is, we have to consider the ease with which the resources may be used, as well as the number of the resources themselves. Applying this to Mexico and Peru, we find that they were the countries of America where this combination most happily occurred. For though their resources were much less numerous than those of Brazil, they were far more easy to control; while at the same time the heat of the climate brought into play those other laws by which, as I have attempted to show, all the early civilizations were greatly influenced. It is a very remarkable fact, which, I believe, has never been observed, that even in reference to latitude, the present limit of Peru to the south corresponds with the ancient limit of Mexico to the north; while, by a striking, but to me perfectly natural coincidence, both these boundaries are reached before the tropical line is passed; the boundary of Mexico being 21° N. Lat., that of Peru $21\frac{1}{2}^{\circ}$ S. Lat.”⁸

⁸ Henry Thomas Buckle, *History of Civilization in England*, I, 77-78.

THE ZODIAC—THE SACRED TRADITIONS— RELATIONSHIP OF EUROPEAN, AZTEC, AND INCA CULTURES

"Yet so much is true, that the said country of Atlantis—as well that of Peru, then called Coya, as that of Mexico, then named Tyrambel—were mighty and proud kingdoms in arms, shipping, and riches, so mighty, as at one time—or at least within the space of ten years—they both made two great expeditions: they of Tyrambel through the Atlantic to the Mediterranean Sea; and they of Coya through the South Sea upon this our island."—FRANCIS BACON, *The New Atlantis*.

THE division of the zone of the ecliptic into twelve parts and the use of animal names for each, and of certain conventionalized symbols representing them, as the zodiac,—with more or less connection with the constellations lying in the sun's path,—which has come down to us from the Greek and Roman, is said to have originated some 4,000 years ago among the astronomers of Chaldæa.¹ It is more than likely, however, that the myths themselves and the fancy of the stars as heavenly counterparts of the animals so closely associated with man had a much earlier origin. The conception, of what the flowery Chinese thought of as the "yellow road of the sun," as a "'furrow' drawn by the solar bull across the heavens," is fancifully suggestive of an early and yet imaginative age of farming and cattle-keeping;² and it is not at all unlikely that the

¹ A. M. Clerke, "Zodiac," *Encyc. Brit.*, 11th ed.

² The poetic imagination of the Ancient Peoples was a conspicuous element of their character and showed itself in their culture and in the expres-

hill tribes, from the high Asiatic plains, who overran the valleys of the Tigris and the Euphrates, brought with them, from a still more remote origin, primitive myths which were later utilized and systematized as the symbols of the solar calendar.

"In the Chaldæan signs fragments of several distinct strata of thought appear to be embedded. From one point of view they shadow out the great epic of the destinies of the human race; again, the universal solar myth claims a share in them; hoary traditions were brought into *ex post facto* connexion with them; or they served to commemorate simple meteorological and astronomical facts."³

The parallel Chinese zodiacal division designated by the twelve "cyclical animals,"—Rat, Ox, Tiger, Hare, Dragon or Crocodile, Serpent, Horse, Sheep, Monkey, Hen, Dog, Pig,—though it is said to have originated under the Emperor Hwang-ti about 2697 B.C., is almost surely only a modification of the myths of central Asia which spread eastward into China and across the Pacific as well as westward to Babylonia and Greece; so that our own almanacal system, coming by way of Europe, is based on much the same plan as that of the Aztecs and Mayas.

"The Chinese circle of the 'animals' obtained early a wide diffusion. It was adopted by Tatars, Turks, and Mongols, in Tibet, and Tong-king, Japan and Korea." And, it might be added, in Mexico and Central America.

sion of their beliefs, myths, religion, songs, and traditions. The Assyrian and Polynesian "Land of No Return" (Tregear, *Polyn. Soc. Jour.*, II, 133) is like Shakespeare's "undiscovered country, from whose bourn no traveler returns."

³ A. M. Clerke, *supra*.

Alexander von Humboldt suggests it is "the zodiac of hunters and shepherds."⁴ The nature-myths on which it is based no doubt were the bold fancies of the virile open-air Proto-Aryan race of farmers, herdsmen, hunters, and mariners,—students of the seasons and of the stars, by which they were guided in their work and in their migrations.

"A large detachment of the 'cyclical animals' even found its way to the New World. Seven of the twenty days constituting the Aztec month bore names evidently borrowed from those of the Chinese horary signs. The Hare (or Rabbit), Monkey, Dog, and Serpent reappeared without change; for the Tiger, Crocodile, and Hen, unknown in America, the Ocelot, Lizard, and Eagle were substituted as analogous. The Aztec calendar dated from the seventh century; but the zodiacal tradition embodied by it was doubtless much more ancient. Of the zodiac in its true sense of a partitioned belt of the sphere, there was no aboriginal knowledge on the American continent. Mexican acquaintance with the signs related only to their secondary function as dies (so to speak) with which to stamp recurring intervals of time. . . . The fish-tailed Goat of the zodiac presents a close analogy with the Mexican calendar sign Cipactli, a kind of marine monster resembling a narwhal."⁵

"The essence of the argument is that in spite of all these differences the people on the two sides of the Pacific made use of the same arbitrary symbols without realizing the meaning originally associated with them in the home

⁴ *Vues des Cordillères* (Paris, 1816), II, 159-60. Identity of Tartar, Manchu and Aztec Zodiacal signs, *Id.*, Vol. II, p. 21.

⁵ A. M. Clerke, *supra*.

of their invention. This utterly precludes any possibility that the Americans invented this symbolism, and makes the speculation of independent evolution inappropriate and inapplicable."⁶

There is a remarkable analogy between the evolution of the Mexican writing from mere pictures of objects to conventional signs and the gradual change of the Egyptian hieroglyphs from the same sort of objective representation to phonetic symbols. The historical interest of the artificial system of notation of the Mexicans' calendar used in their ceremonial rites is in its likeness to the calendrical system of the Chinese, Mongols, Tibetans, and other Asiatic peoples. In both, the zodiacal signs are used in a series of combinations to reckon not only days, months, and years, but cycles of years.

In Mongolia the cycle of sixty years was counted by the "five male and female elements—fire, earth, iron, water, wood" in combination with the signs of the zodiac as e.g. "male-fire-bull year." The Mexican cycle of fifty-two years was counted by a combination of picture-signs, of which the four principal were rabbit, reed, flint, house, in rotation with numbers up to thirteen, thus: 1 rabbit, 2 reed, etc.⁷

The festival of "year-binding" (Mexican word

⁶ G. E. Smith, *E. & E.*, p. 115. "The Mongolian peoples not only count their lunar months by these signs, but they reckon the successive days by them, rat-day, bull-day, tiger-day, etc., and also, by combining the twelve signs in rotation with the elements, they obtain a means of marking each year in the sixty-year cycle as the wood-rat year, the fire-tiger year, etc. This method is highly artificial, and the reappearance of its principle in the Mexican and Central American calendar is suggestive of importation from Asia."—E. B. Tylor, "Mexico, Ancient History," *Encyc. Brit.*, 11th ed.

⁷ Tylor and Lehmann, "Mexico, Ancient Civilization," *Encyc. Brit.*, 11th ed., citing Humboldt, *Vues des Cordillères*.

xiuhmolpilli) marking the end of the great cycle, or "bundle," of fifty-two years was the most impressive of all the elaborate Mexican ceremonies. The Mexicans shared the tradition of the Hindus, and all peoples of Aryan origin, that the world had been several times destroyed, and they looked for its destruction again at the end of a cycle. "As the time drew near, the anxious population cleansed their houses and put out all fire, and on the last day after sunset the priests, dressed in the garb of gods, set out in procession for the hill of Huixachtla, there to watch for the approach of the Pleiades to the zenith, which gave the auspicious signal for the lighting of the new fire. The finest of the captives was thrown down and fire kindled on his breast by the wooden drill of the priest; then the victim's heart was torn out, and his body flung on the pile kindled with the new flame. The people watching from their flat housetops all the country round saw with joy the flame on the sacred hill, and hailed it with a thank-offering of drops of blood drawn from their ears with sharp stone-flakes. Swift runners carried burning brands to re-kindle the fires of the land, the sacred fire on the *teocalli* of the war-god blazed up again, and the people began with feasting and rejoicing the new cycle."⁸

The "tying up of the bundle of the years" is an expression of the same conception of the union of the people with their sun-god as that of the sacred "sun-ties" or *intihuatanas* of the Peruvians. Likewise the impressive ceremony of the renewal of the fires from the sacred flame was one of the principal rites of the Peruvian Ayars; though in

⁸ Tylor and Lehmann, *supra*.



THE MONOLITHIC GATE OF TIAHUANACO

Note above the Indian woman details of the frieze and texture of the stone. The monolith which had been broken in an effort to remove it, and partially buried by drifting soil, as shown in a preceding picture (Vol. I, p. 42), has been excavated and the two parts replaced in position. The portion excavated is marked by the darker color at the bottom.

A smaller monolithic gate has been removed and placed at the entrance of the cemetery in the near-by modern village. Many of the stones from the pyramid, the temples, and other structures have been quarried out for street paving and houses in La Paz.

The frieze is probably a sun calendar of the months. The great stone, with its elaborate carvings, seems to be a product of a high culture resulting from a fusion of Toltec immigrants from the north with chiefs of the great megalithic race of the south Pacific.

Peru it was not characterized to such an extent by cruel and bloody orgies as in Mexico. Nothing could have been more refined in its spiritual expression than the Incarial ceremony of the renewal of the household fires from the sacred sun itself; as though the fresh flame on the hearth, like the intihuatana, kept the intimate daily life of the people in close contact with the divine source of life.

At the autumnal equinox "occurred the second⁹ principal feast of the year, preceded by three days of fasting, . . . the feast of the Renovation of the Sacred Fire, or Mosoc-nina. On the day of the equinox the Inca waited, accompanied by all the priests and chief lords of the country, at the entrance of the chief temple for the rising of the sun, and by means of a metallic mirror, called Incarirpu, concentrated its first rays, setting fire with them to a piece of sacred cotton, picked and prepared for this purpose. This was carried, burning, to the temple, where the sacrifice and offerings to the sun were made, and afterwards it furnished fire to all the houses."

The Peruvians, like the Mexicans, had inherited the Asiatic tradition of the destruction of the world, which, as well as the system of animal signs of the zodiac, we ourselves have likewise inherited from the common Asiatic source. The Paleo-Aryan tradition of the flood was carried in the Mithraism of Persia to Syria and Pales-

⁹ Really the fourth. Markham, *Incas*, etc., p. 135. Rivero and Tschudi, from which this extract is quoted (*Peruvian Antiquities*, p. 132), also make the mistake of referring to the season, when the festival of Mosoc-nina was celebrated, as the spring,—probably because the month, *Pacha Pucuy*, in which the festival occurred, corresponded to March; which, of course, is the autumn in Peru.

tine.¹⁰ We received it from Asia in our Scriptures. It was carried likewise from its original home in central Asia to the east, and reached America, by way of the Pacific, long before its arrival there by way of Europe and the Atlantic.

"A conspectus of illustrative flood stories from different parts of the world would throw great light on the problems before us; see the article 'Cosmogony' [by the same author as this extract], especially for the North American tales. . . . Among the probable minor details of the presumed shorter and older myth, we may include the warning of the 'Very-Wise,' . . . the construction of a chest to contain 'Very-Wise,' . . . the landing of the survivors on a mountain."¹¹ The tradition was preserved in the myths of the Arya-Incas. "No living things survived except a man and a woman who remained in a box."¹²

In the myth of Paccari-Tampu, the four Ayars (or Aryas), "Children of the Sun" and founders of the Pre-Inca line, with their sister-wives, started from the "Tavern of the Dawn" to seek more fertile lands and to "subdue the people" who did not "receive them as their lords." As

¹⁰ In the early Aryan legend, Mithras, the Prince of Light, was born of a rock, and shepherds brought gifts and adored him. The new-born god was cold, and ate of the fruit of a fig tree and clothed himself in its leaves. "Ahriman [the Prince of Darkness] sent a deluge, from which one man escaped in a boat with his cattle." When Mithras' work was accomplished, he celebrated his last supper with his lord, the sun, and was taken up in a chariot to the habitation of the immortals.—Grant Showerman, "Mithras," *Encyc. Brit.*, 11th ed.

T. S. Denison (*Mex. Ling.*, p. 156) suggests a comparison of the Mithraic rite where "the Neophyte is hailed as 'born again' . . . with the Vedic 'twice born' and the Christian 'born again.'"

¹¹ T. K. Cheyne, "Deluge, The," *Encyc. Brit.*, 11th ed.

¹² Molina, *Rites and Laws of the Incas*, Hak. Soc., p. 4.

they neared Cuzco "they saw a rainbow which the natives called *Hunacauri*. Holding it to be a fortunate sign, Manco Ccapac said, 'Take this for a sign that the world will not be destroyed by water.' " ¹³ From the same Aryan source, by way of Persia and the influence of Mithraism in the formation of our Scriptures, we have the same sacred tradition of the rainbow (Genesis 9:8-17). "And God spake unto Noah . . . I will establish my covenant with you: neither shall all flesh be cut off any more by the waters of a flood; . . . I do set my bow in the cloud, and it shall be for a token of a covenant between me and the earth." ¹⁴

It is a significant reflection that the fact of the arrival of these traditions in America by the westward migrations of our own ancestors to Europe and thence across the Atlantic,—as recorded in our authentic history,—in itself makes more probable the analogy of the dissemination of the same beliefs by earlier eastbound folk-movements which have left so many other remarkable identities of race and culture in central Asia and the Andes.

"Humboldt also discussed the Mexican doctrine of four ages of the world belonging to water, earth, air and fire, and ending respectively by deluge, earthquake, tempest and conflagration. The resemblance of this to some versions of the Hindu doctrine of the four ages, or yuga, is hardly to be accounted for except on the hypothesis that the Mexican theology contains ideas learnt from Asiatics.

¹³ Sarmiento, *History of the Incas*, Hak. Soc., p. 51. Markham (*Incas of Peru*, p. 48) says: "The most authentic version of the Paccari-Tampu myth [is] that officially received from the Incas by Sarmiento."

¹⁴ The rainbow as a token and pledge of protection was a legend of Chaldæa and Polynesia.—Tregear, *Polyn. Soc. Jour.*, II, 135.

Among Asiatic points of resemblance to which attention has since been called is the Mexican belief in the nine stages of heaven and hell, an idea which nothing in nature would suggest directly to a barbaric people, but which corresponds to the idea of successive heavens and hells among Brahmans and Buddhists, who apparently learnt it (in common with our own ancestors) from the Babylonian-Greek astronomical theory of successive stages or concentric planetary spheres belonging to the planets, etc.”¹⁵

The much more probable theory would seem to be that this belief spread to Babylon and later to Greece and to India from a common Parent-Aryan source where it originated before the Iranian-Hindu dispersion. It spread to America, directly or indirectly, from the same central Asian culture source.¹⁶

¹⁵ E. B. Tylor, “Mexico, Ancient History,” *Encyc. Brit.*, 11th ed. p. 330.

¹⁶ Lesson quotes Eichthal as calling attention to cultural features in Egypt corresponding to those in Polynesia,—pyramids, mummies, division of the people into royal, military, and popular castes, the same conception of God and the same belief as to a future life and rewards and punishments therein. All of these resemblances may likewise be extended to include Peru.

Dr. Leo Frobenius, eminent German scientist, after years of study in Rhodesia and India, claims “Zimbabwe is one of the last visible signs of a Sumerian-Babylonian culture that came to Africa from Babylonia about 4000 B.C.” Johannesburg correspondence of the *London Morning Post*, in *New York Sun*, March 20, 1930.

XXVI

TEOTL

As the supreme authority and law-giver in the way of right living, much the same conception as that of Brahma and Viracocha appeared in Western China in the earliest times. *Ti* was "the concept of heaven as the ruling power," and *Tao* was the "divine way" or rule of conduct.¹ From the same root, the word *teotl* in the Mexican tongue expressed the conception of god in general² (Greek *theos*, Latin *deus*, Spanish *dios*, English *deity*). The word, as well as the conception which it expressed, was brought to Europe and China and Mexico by diffusion from the same ancestral source. It was carried in a stream of migration, which, although obscured and diluted by its contact and partial absorption in alien races, has left in many places unmistakable traces of its blood and ancient tongue.

It is very likely that branches of this same Paleo-Aryan white race, spreading from a common center, carried from Asia to America, Africa, and Europe the primitive cultures on which were based all of the early civilizations,³—and left in all the traces of their common origin. The process has been continued into historical times and is still in

¹ James Legge, "Lão Tsze," *Encyc. Brit.*, 11th ed.

² Tylor and Lehmann, *Mexico*, etc., *Encyc. Brit.*, 11th ed. p. 333.

³ In their migrations across the Pacific they left traces of their culture all through Polynesia.

"Some of their [the Polynesians'] poetic and even sublime cosmogonies would almost seem to have accompanied all their wanderings from their Central Asiatic cradle, through Malaysia, to their present Eastern homes."—A. H. Keane, *Man*, p. 564.

progress. The flow and counter-flow of the dominant race was evident in the leaders of the Trojan war and the founders of Rome,⁴—as in the conquest of Rome by new invasions of white races from the north, and the development of the later Mediterranean wealth and culture on the ruins of the Roman empire.⁵

Four racial types are represented on the walls of the ancient temples of Egypt,—the white, the brown, the yellow, and the black. The white wears the dress of the ruling caste, the black that of the slave, but the presence of them all represents the process of mixture and absorption by which the conquering white Aryans of India have been merged with the darker indigenous races in the same manner as the absorption of the white stock has occurred in China, Japan, Polynesia, Mexico, and Peru.

The process was not always an incident of military conquest, as in the case of the Medes and Persians, the Mongols, and the Saracens, or of the Spanish conquerors of America,—nor of great migrations such as that from

⁴ *The Passing of the Great Race*, Madison Grant, pp. 154, 159. "Existing Aryan speech on the lips of populations showing no sign of Nordic characters is to be considered evidence of a former dominance of Nordics now long vanished." *Id.*, p. 61.

⁵ There are innumerable evidences of the spread of this racial stock east as well as west from its Asiatic cradle-land.

Eichthal deduces from the identity of the Egyptian and the Polynesian name of the sun, *Ra* (or *Ré*), archaic communication between those two countries. This does not necessarily follow. It is much more likely that the word spread in archaic times from an Asiatic source *west and east*. The first part of the words *Raman*, Chaldæan god of the atmosphere, and *Raman*, Polynesian light, is possibly from the same root, as is our *ray*. In fact it is very likely that the Spanish *rey* (king) and its Latin and other Aryan forebears are descended from the sense of the deification of *Ra*, or *Ré*,—the sun. It is also possible that from a common Asiatic source our word *air* is akin to the Hebrew *aor*, light, the Maori *ao*, daylight, the Chaldæan *ur*, light and day.

Europe to America which began on the report of the discoveries of Columbus and still continues. "It has been suggested that the facts can best be reconciled upon the theory not of a migration of a whole people, but of an incursion of a smaller band who succeeded in establishing their rule over the original people and in gradually forcing their own language, as that of a ruling class, upon those whom they had subjugated, while still the ancient ethnological type continued." ⁶

Mithraism became the great rival of the Christian religion, and, aside from its crass materialism, it contained much in common with the practical moral teaching and elevated spiritual conceptions of Christianity. The lofty literature of the Zend-Avesta bore much resemblance to the Hebrew Scriptures. The worship of *Inti* (or *Indi*), the sun, from the splendid temples on the heights of the Andes, as well as the more spiritual esoteric worship of Viracocha, appears to have been derived from the same original and primitive sources as that of the Aryan Mithras, from a time before the Indo-Iranian division.

The attributes of *Inti*, the Peruvian sun-god, visibly appearing and worshipped as the sun itself, are in large part identical with those of the Indo-Aryan *Indra*, "god of the clear sky," lord of the elements,—of the rain and thunder. *Varuna*, in the Vedic mythology, "makes the sun shine; the wind is his breath; river valleys are hollowed out at his command." ⁷ This seems to be a conception of the god in a physical sense, which, like that of the early Hebrew *Yahweh*, lacks the exalted spirituality

⁶ C. R. Gillett, "Ancient Egypt," *Johnson's Universal Cyclopædia*.

⁷ A. A. Macdonell, *Vedic Mythology*.

of the Peruvian Viracocha, though manifesting the same majestic functions as those of *Inti*, the sun-god of the Incas. Neither of the others represents the sublimity of thought attained by the Peruvians in their conception of Viracocha,—creator of the sun.

Varuna and *Indra* were the greatest of the early gods of the Rig-Veda. *Varuna* is the “double” of *Mithras* and is the “lord of the natural laws, the upholder of the physical and moral order of the universe. His power is limitless, his anger at wrong-doing unassuageable and he is omniscient.” In all of his attributes he is much the same as Viracocha of the Peruvian Andes and Jehovah of the Jews. The beginnings of the conception of all no doubt have the same primitive origin. The extent to which the compilers of the Hebrew Scripture drew from the Zend-Avesta, embodying the cult of *Mithras*, the “double” of *Varuna*, is quite well-known.⁸ *Varuna* is conceived as “the Encompasser”⁹—equivalent to container, depository. *Vira*, in the Peruvian *Viracocha*, has the same significance,—“depository, store-house of creation.”¹⁰ The words as

⁸ “The correct interpretation of the forms assumed by these Indian myths when planted in a far-distant and alien environment across the Pacific will be facilitated by comparison with their fate in the extreme west—in Denmark, Scandinavia, and Scotland . . . Elsewhere, particularly in Hungary, the ‘god of thunder is sometimes represented standing upon the back of a bull, which is decorated with a belt round its body (like Tlaloc and Chac in America) . . .’ Worsaae also refers to a pendant in which the great sea-serpent is represented ‘lying in the ocean which surrounds the world, and against which Thor waged such mortal strife.’”—Smith, *E. & E.*, pp. 61-62.

⁹ A. A. Macdonell, *Vedic Mythology*.

¹⁰ Markham, *Incas of Peru* (2nd ed., London, 1912), p. 42.

Vira (or *Uira*) and *Varuna* suggest an interesting comparison with the primitive Greek *Uranus*,—the sky, husband and fructifier of the earth. Also compare the word *Vira* (in *Viracocha*) with the typically Aryan *Virud* (in *Virudhaka*) of the Chinese Buddhists,—the “Ruler of the South.” The

well as the thought appear to have grown from the same germ.

latter wore an elephant-head helmet; while "inscribed upon the walls of the temple at Palenque [state of Chiapas, Mexico] is the figure of a man [god] wearing the skin of an elephant's head upon his own."—Smith, *E. & E.*, p. 43.

As for the spread of Aryan Mithraism from Persia to Asia Minor and Babylon, see Grant Showerman, "Mithras," *Encyc. Brit.*, 11th ed. Also compare the Mithraic (Aryan) legend of the flood "from which one man escaped in a boat with his cattle."—Showerman, *ibid.*

The Aryans carried the horse to Babylon and Egypt. With it they must have left much of their language and religion. The idea of the Trinity was common to the Persians, Egyptians, Greeks, Romans (Heaven, Earth, and Ocean, corresponding to Jupiter, Juno, and Neptune), and Mayas. The Trimurti, or triune-god (Brahma, Siva, and Vishnu), represented by the triple-headed idol, was the supreme deity of the Indo-Aryans.

XXVII

ASIATIC PLACE-NAMES IN AMERICA

"You shall understand—that which perhaps you will scarce think credible—that about three thousand years ago or somewhat more, the navigation of the world (especially for remote voyages) was greater than at this day. . . . China, also, and the great Atlantis (that you call America), which have now but junks and canoes, abounded then in tall ships."—FRANCIS BACON, *The New Atlantis*.

PLACE-NAMES are among the most enduring records of racial movements. All over the world are found names of places dating back to prehistoric times and still in use long after the rest of the language of which they formed a part has become extinct,—speaking as surely of the former presence there of the people to whom such names belonged as moraines mark the passage of a glacial age.

As the slow change of geologic time modifies but does not entirely obliterate the testimony of the work of the dynamic and chemical forces which built the earth,—place-names, in the long passage of the centuries, often are corrupted and distorted from their original form and yet retain sufficient evidence of the ancient local stamp to make their identification certain. The varied accent and limitations of speech of new peoples, or of the old,—the lazy tendency to condensation, the shortening and merger of syllables, the elimination of letters,—may make what superficially appears to be a new name; which on analysis is manifestly only an evolutionary form of an original desig-

nation, characteristic of a race which is thus shown to have inhabited the place.

Rimac, for instance, the poetic name given by the conquering mountain race of Quichuas,—later ruled by the Incas,—to the “speaking river” as it falls in many cascades, echoing and reverberating through its Andean gorges, by the inability of the coast Indians of Chinese blood to pronounce the letter *r* and the slurring of the final letter became Lima; but its origin remains clear.¹ Ancón, seat of an ancient culture, a prehistoric fishing village on the coast just north of Lima; Chancay, a populous ancient farming community in a rich irrigated valley just north of Ancón,—however they may be spelled by transcribers of a foreign race,—are indistinguishable, when the words are spoken by the native people, from Hongkong and Shanghai.²

¹ *The City of the Kings*, the proud name given by the Spanish conquerors to the capital of the new empire of silver and gold, was too long a title to be used in the common and indigenous speech, and it gave way to the corrupt name of the river on which it was situated and the rich valley watered by the Rimac.

² “Many of the place-names of the Peruvian coast Indians are of monosyllabic, purely Indo-Chinese origin. To prove this I mention only a few which are so undoubtedly Indo-Chinese that even a complete tyro in linguistic questions, but who knows both the place-names of Indo-China and Peru will at once recognize them as such: Cao-chao, Cao-chan, Chan-chan, Man-siche, Vi-chan, Sao, Mo-che, Chi-mu, Mon-se-fu, Si-an, E-ten, etc.” —José Kimmich, *Bol. Soc. Geog. de Lima*, XXXIII (1917), 3rd quarter, 346.

Chinchu,—the spelling given by the English to the Chinese name *Ch'üanchow*,—is “an ancient and famous port of China in the province of Fu-kien.” . . . “It was in the middle ages the great port of Western trade with China and was known to the Arabs and to Europeans as Zaitūn or Zayton, the name under which it appears in Abulfeda's geography and in the Mongol history of Rashīddūdīn, as well as in Ibn Batuta, Marco Polo, and other medieval travellers.”—*Encyc. Brit.*, 11th ed.

Its harbor has long since been obstructed by sand and Chinchu has been supplanted as a port by Amoy.

But long before the travels of Marco Polo the great ships of Chinchu

In Nakuk Pech's statement of the "ancient title" of his family and lineage, he tells how they settled in the land of Ti-Ho (about Mérida, the ancient capital of Maya, "the plain,"—which is Yucatan, the same as Yoktan of Chinese Turkestan) and speaks of the village of Ti-Uoh in that country. "I who speak," he says, "I, Nakuk Pech, one of the principal lords who were conquered in that country, in the commune of Maxtunil, . . . am placed (by the conquering Spaniards) in the new town of the lands of Chac-(sic)Xulub-Chén"; whereas, he says, he had been left by his fathers, "the Ahnaum Pech, the lordship of lands which included both of the communes of Chinchin-Ica and Cháac-(sic)Xulub-Chén." Chinchin-Ica (note also *Ica* in Peru), in the careless common talk of the people, became Chichen-Itza (whose famous ruins are now being uncovered) by much the same process that *L'Anglais*, as spoken by the Indians and French pioneers of the Canadian woods, in referring to the English settlers—became the nickname of the great *Yankee* nation.

Nakuk Pech, "*moi qui parle*," goes on with the narrative and tells of his arrival at the "village of Timul" (Timur) and of the time when the Spaniards came to "this Peninsula of Lipatan-Yacatan (sic)" (in another passage spoken of as Zipatan-Yucatan); of the retirement of the people to the town of Ti-Coch, and later to Ti-Nun,³—names that are strange composites of Aryan and Chinese, reminis-

carried on a flourishing trade in the Indian and Pacific oceans. It is very likely that centuries before Columbus and long before there were any "great ships" in the Atlantic, colonists from Chinchu had carried its name across the Pacific. It appears in the rich valley of *Chincha*, Peru, and the famous *Chincha* Islands.

Chinchay-suyu was one of the principal divisions of the Inca empire.

³ Brasseur de Bourbourg, *Études sur Le Système Graphique et la Langue des Mayas* (Paris, 1870), Vol. II, pp. 110-20.

cent of the primitive stock of the ancestors of Timurlane and of the people of Sohrab and Rustum ⁴ on the plains of the Oxus and Jaxartes and of ancient migrations and contacts with Chinese hordes; of the mixture of the Aryan and Mongol.⁵

How much of Chinese blood, how much of the white Aryan race which swept over China and launched its daring argosies by the sea, how much of the black indigenous races met with in the various stages of these migrations in prehistoric times, flowed in the veins of the people who fixed these names to places in Asia, its great coastal island (Timor), and upon the opposite shores of the Pacific ⁶ cannot be measured any more than it can be measured in the varying castes of the Chinese race to-day; but the unbroken stream which survived the amalgamation of bloods, the evolution of cultures and tongues, and the profound changes of environment, left enduring records of its identity, however diluted it may have been, in the names of the river settlements and fishing villages of the Peruvian coast.

The name *Asia* itself appears on the Peruvian coast south of Lima,—designating a valley with much rich land

⁴ The Polynesian story of *Iro-ma-oata* in search of his lost father, *Moe-tara-uri* ("Hawaiki—the Whence of the Maori," S. Percy Smith, *Polyn. Soc. Jour.*, VIII, 41), vividly reminds one of the Aryan story of Sohrab and Rustum. (Matthew Arnold's poem.)

⁵ "The Chinese original place, the Chinese 'mother-land,' must lie somewhere west of the present Central China." The present Chinese race is the result of the amalgamation of the primitive Northern Chinese with the indigenous people of South China.—S. M. Shirokogoroff, *Anthropology of Northern China* (Shanghai, 1923), pp. 110, 112.

⁶ The tradition of the Hawaiians was that their ancestors came from the "Yellow Sea of Tane" (*Te Tai Meremere a Tane*). Lieutenant-Colonel Gudgeon, *Polyn. Soc. Jour.*, XI, citing Judge Fornander (*The Polynesian Race*).

but intermittent water supply,—the seat of an ancient agricultural settlement. Markham says ⁷ that the word was formerly *Asyac*. If this is correct the final *c* probably faded out in the indolent coast accent, much as the final *c* was dropped from *Rimac* and the word became *Lima*.⁸

⁷ *The Incas of Peru*, p. 227, note. *Asyac* is the adjectival form.

⁸ *Atia* (*Achia*)-*te-varinga-nui* (Asia, the great rice-land) was "the most ancient land known to the Rarotongans."—S. Percy Smith, "Hawaiki—the Whence of the Maori," *Polyn. Soc. Jour.*, VII, 214.

The name Asia (*Atia*, *t* pronounced as *ch*), ancestral cradle-land of the Rarotongans, appears also in *Atiu*, one of the Cook group of islands.

The Chimus of the north coast of Peru bore the name of the Chi-mus of southeast Asia (José Kimmich, *Bol. Soc. Geog. de Lima*).

The capital of the Peruvian Chimus, Chan-Chan (City of the Serpent) had its name-kin in Shan-Shan (City of the Serpent), discovered by Dr. Sven Hedin, in the Desert of Lop, Kashgar (Chinese Turkestan). Bealby and Kropotkin, "Turkestan," *Encyc. Brit.*, 11th ed., XXVII, 425.

"It appears very probable that at the dawn of history East Turkestan was inhabited by an Aryan population." *Id.*, 424. In the pleasant highlands of central Asia they carried on their warfare for ages with the "inferior peoples." *Darya* is still the name of a province of west Turkestan. From central Asia, apparently, their colonists brought place and family names and the common speech of the people to America.

Khotan, Yotkan, Yoktan, Toklamakan (of Turkestan), seem to have their counterparts in Yucatan, Votan, Copán, Amatitlan, of the ancient Americans. The Chinese name for Khotan was *Yu*-than (J. T. Bealby, "Khotan," *Encyc. Brit.*) This was no doubt a contraction of *Yu*-Kho (Co, Ca, Cu)-than.

Even the name of *Nakuk Pech* (*ante* p. 206) himself bears a startling resemblance (as pronounced) to *Yakub Beg*, Khan of Kashgar, Chinese Turkestan, 1861-73. It is evidently the name of an ancient family of Turkestan with offshoots who were rulers both in America and Asia.

Even the name (*Hue-Hue*) of the cradle-land of the Nahuas, *Nakuk Pech's* people (Brasseur de Bourbourg, *ante*, Vol. I, p. 159), appears in Kashgar, homeland of *Yakub Beg*. Wilhelm Filchner, *Hui-Hui*, Berlin, 1928.

"The name [Jacob] existed long before the traditional date of Jacob, and the Egyptian phonetic equivalent of Jacob-el (cf. Isra-el, Ishma-el) appears to be the name of a district of central Palestine (or possibly east of Jordan) about 1500 B.C. . . . It would appear that these . . . narratives of Jacob-Israel embody . . . a recollection of two distinct traditions of migration which became fused among the Israelites."—Stanley Arthur Cook, "Jacob," *Encyc. Brit.*, 11th ed.

Cf. also *Vukub* (Yukub?) Cakix, the high priest of the Quichés of Guatemala. (*Popol Vuh*, p. xxix, n. 3.)

Nevertheless the name is suggestive and inquiry into its origin would be interesting. The typical Mexican-Maya termination, *-ac*, *-ec*, or *-oc* (as in the Mexican *Anahuac*, the Peruvian *Hualguayoc*), meaning pertaining to, having the quality of,—in other words an adjectival ending,—so common in Mexico, Central America and Peru, is itself suggestive of an Aryan origin as in such names as the Russian Vladivostok, Byelstok, the Mexican Chapultepec (grasshopper hill), and Syrian Baalbec.⁹

-Ac, *-ec*, *-oc*, as in the Mexican Toltec, Tehuantepec, Amozoc, Atoyac, Chiltepec, Ecotepec, Jilotepec, Jaltepec, Ometepec; the Peruvian Tlapallac (Lambayeque), Calayuc (in northern Peru among the cordilleras, where there are so many place-names of Mexican and Mayan origin), are Aryan adjectival terminations,—e.g. as though *Asia*, the name of the valley referred to, meaning “east,” had originally been *Asiac*, *eastern*.¹⁰

Relationship or contact of the foregoing with the people migrating by the Aleutian Islands and Bering Strait is shown by the same adjectival ending in Eskimo and Aleut descriptive names of places as e.g., Kadiak; also, in Greenland, Upernivik, Angmagsalik. In Iceland also

⁹ The Syrian *bec*, Aztec *pec*, mean hill. *Baalbec*, Baal’s Hill,—the high-place of the god, like Mars’ Hill in Athens.

Our *peak*, *beak*, are from the same root and source as the Syrian *bek*, *bec*; the Aztec *pec*, *bec*. The Proto-Aryan root with the adjective inflection,—meaning pointed, sharp, steep,—came to be used as an adjective-noun, meaning hill, peak, beak, etc. The same root appears in the Quichua *pic-chu*, high peak.

¹⁰ Note also the same class of adjectival inflections in the place-names Tepalcatepec, Mixtepec, Quitovac (note that the substantive base of this last name is the same as that of the capital of Ecuador), Sultepec, Yantepec in Mexico. Brasseur de Bourbourg, *Lengua Quiché*, p. 11, states that this termination forms in Quiché the plural of adjective-nouns. In Peru the plural was formed by an additional vowel suffix, as in *Lambayeque*.

this distinctive terminal appears in Reykjavik, whither it was brought from Scandinavia where similar terminations, with the same adjectival significance, appear in Laurvik (Norway) and Vestervik (Sweden),—brought with other cultures from the archaic East.

XXVIII

SANSKRIT AND SUMERIAN ROOTS OF QUICHUA WORDS

It should be borne in mind that the Sanskrit words here cited are from the classical written language of the Hindus. There was undoubtedly a greater resemblance between the ancient colloquial speech of the people and the spoken Quichua, whose writings, if any existed, had long been destroyed and prohibited by the orders of the kings at the interested suggestions of the priests.

Sanskrit words found in Quichua speech were not derived from the Sanskrit, but were probably brought to America before the classical Sanskrit was developed and long before either the Rig-Veda or the later great Hindu classics were put in writing. They were derived by both the Sanskrit and the Quichua from a common earlier source which was probably much nearer to Quichua, even with all the latter's changes,—Quichua having remained only spoken, and never having become a written language, so far as any records survive (except in the efforts of foreigners to reproduce it in an alien alphabet),—than the later refinements of classical Hindu literature.

QUICHUA	SANSKRIT ¹
akapana (clouds colored by the sun)	aka (painting)
anak (cruel)	nac (to kill)

¹ *Races Aryennes du Pérou*, Vicente Fidel Lopez (Paris, 1871).

QUICHUA

antes (the Andes)
 challa (shuck, the covering of
 an ear of corn)
 chani (price)
 chinkat (jaguar)
 chirau (resplendent)
 chiru (side)
 chupe (soup)
 hina (also)
 hina (employment)
 huakra (horn)
 huanaku (native wild sheep or
 camel of the Andes)
 huayakka (wallet)
 hukkau (a woman's sash)
 kakarpa (tent)
 kaukay (repose)
 killa (moon)
 kukulla (sucking babe)
 llakka (slender)
 llapi (chant)
 llimpi (paint)
 ma! (let us go)
 man-na (no)
 mita (time)
 mukkani (to emit a disagreeable
 odor)
 muti (pounded corn)
 mutka (plaster)
 nakcha (to comb)
 naña (sister)
 pakkini (to break)

SANSKRIT

anti (before, in front. Eng-
 lish compounds, e.g. *antith-*
 esis; Greek *avti*; Latin *ante*.
 k'alla (outer covering)
 jani (produce)
 sinha (lion)
 sura (to shine)
 c'iru (shoulder)
 supa (sauce. English *soup*.)
 êna (also)
 ina (master)
 vakra (curved)
 vanuku (an antelope. Note the
 Spanish *venado*, deer.)
 vayakka (packet)
 uk (to adorn)
 k'arpara (parasol)
 ôka (repose)
 kil (white, shining)
 k'ulla (little)
 lagu (slender)
 lap (to speak)
 limpami (ointment)
 mi (to go)
 mâ, na (no)
 mita (step, passage of time)
 muç (to emit)
 mut (to pound)
 muta (to bind)
 naka (to claw)
 nanda (sister)
 pike' (to break)

QUICHUA	SANSKRIT
paksa (the moon)	paksa (the full moon)
pakta (precaution)	pac (to take precaution)
parusara (the burnt part of roasted corn)	perú (fire)
pichani (to color)	sara (grain)
	pinj (to paint. Note resem- blance to English word.)
pikani (to gather, as flowers)	pic' (to break off. English <i>pick</i> .)
pirhua (granary)	pura (granary)
pisi (small)	pis (to break in small pieces. English <i>piece</i> .)
pitita (bedroom)	pita (house, cottage)
pitiuni (to desire)	pid (to require. Spanish <i>pedir</i> ; English <i>bid</i> , <i>petition</i> .)
puchu (detail)	puc'c'a (pronounced <i>pucha</i> — the tail)
pupa (bird lime, or glue)	pupa (honeycomb)
puti (leather trunk)	put (to enclose, to bind. Eng- lish <i>put</i> .)
pututu (sea shell used as trum- pet)	puta (shell)
rasnini (to tremble)	rus' (to tremble. English <i>rustle</i> .)
rattani (to yoke, to attach)	rata (coupling together, sexual union)
reksini (known by sight)	raks' (to see)
roka (a bush used for fuel)	coka (a bush used for fuel)
ruhhu (decrepit)	ruj (to be broken)
rupani (to burn)	ru (fire)
sacha (tree)	sac'c'a (pronounced <i>sacha</i> — tree)
sani (violet color)	sani (shining)
sapi (root)	çap'pa (pronounced <i>sapa</i> —foot, the "foot" of a tree)

QUICHUA

sekkani (to transport)
 simi (mouth)
 simpa (cord)
 sipi (the dawn)
 sirini (to lie down)
 sokta (six)
 sonko (heart)
 soro (a spirituous liquor made
 of corn, stronger than
 chicha)
 sorochi (malady caused by de-
 oxidation of the blood at
 high altitudes in the Andes)
 sunu (vase)
 supullu (scalding)
 suti (tribal name)
 tambo (tavern)
 tankat (thorn)
 tapa (nest)

 tunkini (to hesitate)
 tupani (to scratch)
 tuta (the night)
 tatahua (four)
 tatatkini (to stumble)
 uiksa (belly)
 uiru (stalk of corn)
 uispalla (twin sisters)

SANSKRIT

sag (pronounced *sak*—to move)
 simi (smile)
 samb (to tie)
 çipi (ray of light)
 çī (to be lying down)
 s'as (six. Spanish *seis*.)
 çink (to beat)
 sura (spirituous liquor)

 çira (vein, artery)

 suna (pot for water)
 çop'a (scalding)
 suti (origin)
 tamb' (to travel)
 tank (thorn)
 tap (warmth. Spanish *tapa*
 and English *top*, cover.)
 tun (to be sinuous or curved)
 tup (to scratch)
 tutt (to cover, to hide)
 dva-dva (four)
 tank (to totter)
 vic (to enter, within)
 vira (stalk)
 dvis (twice)

Note the identity of the roots: English *twice*, Quichua *uis*, and Sanskrit *dvis*, Latin *bis*.

uma (the head)
 uña (a lamb)
 utka (quick)

uma (the intelligence)
 ûna (a small thing)
 utka (avid)

QUICHUA	SANSKRIT
viskacha (hare of the Andes)	viskand (there it runs)
yana (black)	yana (black)
yatay (cocoanuts which grow in bunches)	j'ata (heap, pile)
ytuchi (wild boar)	iti (evil, wild beast)
yuyu (pot herbs)	yu (pottage)

The Quichua *mama* (mother) is the name of the sea,—just as in French the sea is *mer*, in Spanish *mar*, both like the Latin *mare* from the same source as the Sanskrit *matr*, mother.

There are also many words in the Quichua speech of the same roots, and still more of the same sounds, as corresponding words in the pre-Semitic tongue of the valley of the Euphrates,—to which has been given the name Sumerian. The origin of this prehistoric non-Semitic tongue, which, along with the Sumerian solar deities, was adopted by the Semitic Chaldean-Babylonian invaders, is still unknown. The word *Akkad*, with which it is associated and sometimes used interchangeably, and the words *shingi*, *sungir*, and *kengi*, given by some philologists as evolutionary forms of the primitive root,² would seem to clearly indicate a Paleo-Aryan source. The circumstance of the kinship of the Sumerian with the Quichua and many other indigenous American tongues, properly considered, may throw light on the unsolved "Sumerian problem," as well as on that of the Quichuas.

This community of words does not mean that there was communion between Shumer (Sumer) and Peru; but it does indicate that many thousands of years before the

² J. D. Prince, "Sumer and Sumerian," *Encyc. Brit.*, 11th ed.

Christian era a sun-worshipping agricultural people, probably of the white race, sent its branches from some point in the central Asian plain to the west and occupied the valley of the Euphrates,³ and also to the east and south-east; that all of these retained their mother tongue and, through the changes of varying contacts and innumerable generations, portions of it have survived to this day in every continent.⁴ The movement to the east was as natural and is as well authenticated as that to the west, and reached America probably as soon as the latter movement reached western Europe; and many words of the ancient tongue are still in daily use in the common speech of the herdsmen and farmers of the Peruvian cordilleras.

The following words among many others will illustrate

³ Ignatius Donnelly, *Atlantis*, p. 432, cites M. Terrien de la Couperie as holding that the Chinese language is related to the Chaldean.

⁴ J. Macmillan Brown, "Languages of the Pacific," *Bishop Museum Occasional Papers*, VII (1918), 15, claims that the Proto-Aryan speech had only one sound for "each of its explosive consonants, that of the lips, that of the teeth, and that of the palate," but that the later Indo-European tongues split up each of these consonants into three sounds,—p, b, f; t, d, th; k, g, gh,—"thus adding six sounds to the original range" of the mother tongue.

"That this was the case is shown by the discovery of a new Aryan language by Sir Aurel Stein in Chinese Turkestan some seven or eight years ago. He found a manuscript in the ruins of a Buddhist city written in an unknown tongue that was spoken by a people of the Tochari, included during Roman times in the Bactrian Empire. It was found to be a pure Aryan tongue of the Indo-European type before the consonants had changed; it had only one dental, one labial, and one palatal. Primeval Aryan, as it is seen in Tocharish, has the same range of sounds as Polynesian and practically the same sounds and number of sounds [p. 23]. . . . The primeval Indo-European had the same sound law as the Polynesian; it preferred to close a syllable or word with a vowel. The Tocharish, like the Polynesian, retains the *k* sound [p. 24; in Sanskrit this has been changed to *s*]. . . . The linguistic attitude of Polynesian faces north towards Japanese and Ainu, which have got no such restriction on their use of nouns and numerals" (*id.*, p. 26). The restriction referred to is that set out by Brown as belonging to the Melanesian and Indonesian tongues.

the manner in which these far-flung tongues have drawn from the common source.⁵

QUICHUA	SUMERIAN
chunka (ten)	gun (ten)
ututu (Aymará) (house)	u (house)
ka (mouth)	ka (mouth)
kutui (to cut)	kud (cut. Note the Aryan character of the Sumerian root and its identity with the English.)
usa (louse. Maya <i>uc</i> ; Quiché <i>uk</i> .)	uk (louse)

In Sumer fire is *kun*; Dogrib, *cun*; Shoshoni, *kuna*; in Chippewa, *kon*; in Huron, *kon*; in Algonquin, *kon*.⁶ The Paleo-Aryan source of Sumerian is suggested by the similarity of the Spanish *ojo*, eye, Sumerian *iji*, eye, and the latter's distinct kinship with the American tongues by such words as the Sumer *gab*, the Quiché *gab*, and the Maya *kab*, all meaning hand.⁷

In the beginning of his elaborate work Patrón states: "I propose to prove in this work the Sumer-Assyrian origin of the Quichua and Aymará languages of primi-

⁵ Pablo Patrón, *Nuevos Estudios sobre las Lenguas Americanas, Origen del Kechua y del Aymarâ* (Leipzig, 1907). Patrón shows that these as well as many other words of Asiatic origin were in use in many other indigenous American languages both in North and South America.

⁶ Patrón, *supra*, p. 18.

⁷ Charles E. Woodruff, *Effects of Tropical Light on White Men* (Century Co., 1889), p. 152, quotes DeKay as seeing "many resemblances in both old and modern Gaelic (Aryan) to the languages of the Finns, Huns, Turks, Lapps, and the Uighurs of Asia Minor,—all relatives of the eastern Sumerians and Accadians, plains and mountain people respectively, who gave to early Chaldea and Assyria their pre-Semitic civilization."

tive Peru,—still spoken by the Indians of Peru and Bolivia.

“They are not an isolated case, since the influence exercised on the American continent by the Semitic languages, the Sumerian and its affinities, is not confined to these limits. On the contrary long and laborious investigation has taught me that many languages of the New World owe their existence to the tongues just mentioned.”

He would, perhaps, have been more nearly correct had he deduced from the identity of words and linguistic construction, which he cites, the conclusion that they were traces which had been derived in various ways by all these races from *a common earlier source*.⁸

⁸ The special and more or less esoteric language of the Inca caste had become practically obsolete shortly after the Spanish Conquest. T. A. Joyce, *South American Archaeology* (London, 1912), p. 213, citing Garcilasso de la Vega. The language of the Polynesian immigrants would tend to disappear as they brought no women with them, took native wives, and the children would speak the language of their mothers. T. A. Joyce, *ibid.*, pp. 190-191, 241. The caste language probably retained much more of its original forms than the common speech of the people. It probably also was from a different source, or, at least brought from it in a different epoch, and may have been much nearer the Sanskrit.

XXIX

ARYAN SPEECH IN ANCIENT AMERICA

THE ancient Aryan speech,—which was the mother tongue of the Sanskrit, the Old Persian, and the other Indo-European languages,—by the frequent recurrence and combination of vowel sounds, was rhythmical and melodious. Many of its branches have retained this mellifluous quality, and even tongues of different stock have borrowed much from it. It spread from its central Asiatic origin east and west as well as south and left its permanent record in the place-names of China as well as on the Iranian plateau, around the Caspian Sea, and in the Balkans. It was a forceful and vigorous as well as a musical tongue, and the soft flow of its vowels and diphthongs was not only varied but punctuated by consonants in forceful combinations with vowels in emphatic syllables.¹

Like the race itself which produced it, it spread, with many divergencies, modifications, and accretions, through Asia and Europe, to some extent in Africa, and eventually reached America in different epochs from opposite directions, by wholly independent movements, by the Pacific and the Atlantic. Its unmistakable traces were found in the speech of the ancient Mexicans, Mayas, Quichuas of

¹ Alfred Maury (Nott and Gliddon's *Indigenous Races*, p. 52) is of the opinion that the autochthonous pre-Aryan tongues of Europe and Asia were already related before the advent of the Aryans. It is said that the earlier Proto-Aryan speech, like the Polynesian, did not end a syllable with a consonant.

Peru, and many other peoples of America; and our own European race has brought with it in its later migration to America many of the same words as well as religious and other cultures from the common Asiatic origin.²

Features of the ancient tongue spread in the Tibeto-Burman languages from the highlands of Yunnan and Szechwan, first into the foothills and then the lowlands of Indo-China. In the great sea-expeditions, which were a feature of the early folk-movements of the adventurous white parent-race, root-forms of the mother Aryan tongue were carried into the far archipelagoes of the Pacific and the continent beyond.³ Of all tongues of the early branches of this imaginative race, which left its poetical

² Dr. A. Carroll (*Polyn. Soc. Jour.*, I, 242) traces, by their tribal and totemic names, different clans or families "from *high Asia* across to North, to Central, and to South America, and also . . . through the Eastern Archipelago and the Pacific Ocean islands." (Italics mine. M. P.)

In "Hawaiki—the Whence of the Maori" (*Polyn. Soc. Jour.*, VIII, 1), S. Percy Smith holds that the Polynesians were originally of a Caucasian stock from Asia.

Lieutenant-Colonel Gudgeon, C. M. G., "The Whence of the Maori" (*Polyn. Soc. Jour.*, XI, 179), calls attention to the word *pari*, meaning cliff, in the Hindu Kush, quoting from the book, *Where Three Empires Meet*. He also remarks that he has seen it stated that "certain tribes of the Himalayas used the word *punalua* to express the condition of having more than one wife." In Hawaii *Pali* is the word for cliff (cf. English *palisade*), and the Maori uses the word *punarua* to describe the condition of having more than one wife. At this point the editor of the *Polynesian Society Journal* inserts a footnote: "If Colonel Gudgeon had extended his comparison to the customs of races inhabiting some parts of the Himalaya ranges not far from 'where three empires meet,' he would have found them identical with those of the Polynesians. Indeed in our opinion he is here much nearer to the source of the Polynesian race than elsewhere."

³ There are many curious examples of rudimentary survivals both in Polynesian and in our own English vernacular from a common archaic mother tongue. E.g.:

POLYNESIAN		ENGLISH
melu	soft, mellow	mellow
mutu	silent	mute, silent

myths and flowery epithets all along the line of its migrations, the Polynesian, in its celestial islands, was perhaps the most musical, and the traditions of the race were chanted in song.⁴

The Quichua tongue—though hardened somewhat by its environment in the lofty heights of the Andes, and not so musical as the speech of the Polynesians under the soft breezes of the South Seas, nor as that of the Moches on the north Peruvian coast—is a language of poetry and eloquence. A well-delivered oration in Quichua, in its measured harmonies and cadences, is like a recitation of *Paradise Lost*. This ancient tongue of the farmers and herdsmen of the high Andes is rhythmical in its construction and musical in its combination of tones. It is

POLYNESIAN		ENGLISH
hake	a trip or journey	(slang) hike
hale	house	hole, a den, a burrow, a hiding place. Cf. hall
ale (Hawaiian)	to swallow	ale, aliment, etc.
folā (Samoan-Tongan)	to unfold	fold

Another curious instance of the identity of Aryan roots is the Rarotongan *pero* (dog) and the Spanish *perro* (dog).

"The fundamental principle that divides Polynesian phonologically from all to the West is that it must close a syllable with a vowel and it cannot pronounce two consonants together."—J. Macmillan Brown, *Bishop Museum Occasional Papers*, VII, 18.

This is cited as proof of the antiquity of the movement into the Pacific. The Proto-Aryan tongue, before the development of the various Indo-Aryan offshoots, was marked by the same characteristic.

The Quichua had passed beyond this stage and like its Indo-European cognates had mastered the use of the explosive final consonant.

⁴ In 1917 I rode in the long procession which followed the body of the late Queen Liliuokalani to her tomb in Honolulu. For days members of her family had kept the royal kahilis,—great feather standards,—waving over her coffin in the mortuary church. The funeral was stately and impressive and nothing could have been more solemn than the Homeric chant of the Queen's life-story by a Hawaiian chief who marched behind the hearse.

vigorous and sonorous in its abundance of vowels, short syllables of one or two vowels and one consonant, its accumulation of vowels in many diphthongs, and the expression of numbers,—of quality, or quantity, of the plural, of comparative or superlative,—by musical repetition.⁵ It is graphic in many onomatopœic words,—designating things or elements by imitating their sounds.⁶ Like many of the languages of central and southeastern Asia, it is synthetic and agglutinative, and by a series of affixes, infixes and suffixes, is capable of most elastic and definite expression.

While retaining this primitive strength, it had, like the Indo-European tongues, gone beyond this stage of development and enriched itself by the formation of composite words and the use of inflectional variations of few and simple forms but wide and facile application.⁷

⁵ A pleasing example of this in the north is *Walla Walla*,—many waters, —the name of a beautiful valley in southeastern Washington and of the Indians who dwell there.

⁶ Such as *kun'un'un'un* (thunder); *pakakakan* (popping, as of corn when it is toasted); *kal'al'al'an* (to drag); *wis'is'is'in* (to whiz or hiss), etc. Barranca, *Bol. Soc. Geog. de Lima*, XXXI (1915), 1st quarter, 8, 13, 16.

⁷ "In observing the genesis of the ancient pre-Incan culture, this question may be asked at the start: Why must the Quichua race have been the most ancient of the enlightened races of South America? Why must it and no other have been the creator of the most remote Peruvian civilization revealed in the prodigious monuments of stone scattered over an expanse of more than eight hundred leagues? The most convincing proof of the antiquity and the predominance of the culture of the Quichua race we find in its language. Rich in words, flexible to every shade of thought and adaptable to the multiple relations of things, of properties, and of phenomena,—it presents a structure so regular when compared with the greater part of the classic languages of old Europe that to exhibit itself so harmonious and polished must have required the slow labor of thousands of years. Pí and Margall consider it one of the best of American languages 'for force of expression, its wealth of words, and the sweetness of its tones.' . . .

"How many centuries were required in order that there should be de-

The Aryan word *rumi*, in Quichua (Peru), means rock; in Quiché (Guatemala) ⁸ *rum* signifies to throw with force, to vibrate noisily (note our words *rumble* and *rumor*); Old French *rumor* (noise); German *Ruhm* (glory, honor). Given to a man, the title *Rumi* seems to be equivalent to the slang, "a man who makes a noise in the world," or a man about whom there is much talk, or "rumor,"—in other words, a famous man. In both Quichua and Quiché it acquired a metaphorical sense of force, strength, glory. One of the able generals who were trained under the great Inca Huayna Ccapac, and who served Atahualpa, was named Rumi-Nauí, as Alexander the Great was called by the Persians (Aryans) Iskander Rumi.⁹

veloped in this way this idiom of such forceful structure and such regular forms? It is necessary to consider it, as Barranca says, as not any longer merely a speech of agglutination but a paragogic idiom, one which grows by the addition of suffixes which amounts to a characteristic feature connected with its internal structure."—Horacio H. Urteaga, *Las Antiguas Civilizaciones y Razas del Perú*, Lima, 1921; reprinted from *Bol. Soc. Geog. de Lima*, 1919.

It had passed through the same process as the other branches of Aryan speech and though not enriched as the great modern languages, such as English, by borrowing from almost all the languages of the world, it had arrived at the same stage of development as the best of the Indo-European tongues. "It is customary to talk of the roots, stems, and suffixes of words in the Indo-European languages. These languages are distinguished from languages like Chinese by the fact that in the great majority of words suffixes can be separated from roots. But the distinction between them and the so-called agglutinative languages is one of degree rather than of kind. . . . The dispersion of the Indo-European people over the areas they now inhabit or inhabited in the earliest times known to history, must have been gradual, and commerce or communication between different branches must have already existed to some extent; the word might thus have been transmitted from one community to another."—Peter Giles, "Indo-European Languages," *Encyc. Brit.*, 11th ed.

⁸ Brasseur de Bourbourg, *La Langue Quiché* (Paris, 1862), p. 216.

⁹ In this latter case the cognomen may have been originally a geographic designation, as the Persian (Aryan) name for Asia Minor was *Rum* and the Greeks are called *Rumi* by the Persians. But the *original* significance

As in the Aryan languages, the verbal moods and conjugations in the Quichua were simplified both in number and in form; but this simplicity was supplemented by another great characteristic which gave superior elegance and flexibility to the language: "the facility and conciseness with which the verb fused with its subject . . . 'drinking in the pronoun.'" ¹⁰ This is the typical evolution of the Aryan speech. "The decay (of verbal moods) in Aryan may be largely attributed to the power which this group developed, beyond any other, of making compounds which in practice took the place of subordinate sentences to a large extent." ¹¹

The Latin *aqua*, Spanish *agua*, water, is obviously from the same root, *in the spoken language*, as the Quichua *yacu*, water. The common Aryan stamp is plain in the Quiché *huz*, corner or retreat in a room or apartment; ¹² Danish *huus*, Anglo-Saxon *hus*, Old French *husse* (coverlet), Old High German *huisa* (shell), Quichua *huasi* (house), English *house*. The same is true of the Indo-Aryan *Manu*, the spirit god, the "fetish man," who gave laws to mankind, ¹³ and from whom the human race is descended; the Quichua *Mana* (Evil Spirit); Chippeway, *manito* (Spirit); Latin and English, *manes* (spirits of the dead). ¹⁴

The Quiché *popol* (as in *Popol Vuh*, the people's in the mother tongue lies further back. *Rome*, in its beginning as a strong fortress on the rock-cliff of the Palatine Hill, probably had its name from the same Aryan root.

¹⁰ Urteaga, *supra*, p. 283. This is a marked beauty of the Spanish idiom.

¹¹ Peter Giles, "Indo-European Languages," *Encyc. Brit.*, 11th ed.

¹² Brasseur de Bourbourg, *supra*.

¹³ The Book of Manu, still the basis of Indian law.

¹⁴ Our Aryan word *man* is from the same primitive root origin.

book, or national book of the Quichés, edited by Brasseur de Bourbourg) is the Italian *popolo*, Roman *populus*, English *people*, *popular*. *Nook*, Eskimo, and *nook*, English, are the same word with the same meaning in both languages,—a quiet place of shelter or refuge.¹⁵ The Gaelic is *niuc*. It is of Aryan origin,—a curious example of a primitive Asiatic word arriving in America from both east and west, thus, by this small syllable, uniting in some point of contact or origin folk-movements which have diverged to the opposite sides of the earth and come together again after completely encircling the globe in opposite directions.¹⁶

The English *chilly*, cold, appears in the Quichua *chiri* (as pronounced by some tribes, *chili*), cold. The Aryan root which appears in the Spanish *atar*, English *tie*, is retained in the Quichua *huatay*,—the pronunciation of the last syllable being identical with the English word.

Among many other roots common to the English and the Quiché tongue may be cited the following¹⁷ in which the resemblance and often the complete identity appear more clearly in the spoken than in the written word.¹⁸

¹⁵ For example, *Nook*, the Eskimo name of Teller, Alaska, where boats find shelter from the storm and where Amundsen's airship found a haven after its flight across the Pole.

¹⁶ Dr. Roland B. Dixon, *Racial History of Man*, p. 486, says that the Eskimos are descended from Asiatic immigrants of the "Caspian" (white) race. Knud Rasmussen, after living among the Eskimos, is of the opinion that the so-called "white" or "blond" Eskimos of Victoria Land, discovered by Klinkenberg and visited by Vilhjalmur Stefansson, are of original white stock and not Norse-Eskimo hybrids. *Across Arctic America*, New York-London, 1927, p. 287. Among most of the Eskimos the white blood has been almost lost by mixture with that of the "darker races."

¹⁷ Brasseur de Bourbourg, *La Langue Quiché*.

¹⁸ "The true classification of linguistic affinities is not by their grammar but by their phonology,—i.e., the range of sound and sound-laws that belong to them."—J. Macmillan Brown, *Bishop Museum Occasional Papers*, VII (1918), 15. Italics mine, M. P.

QUICHÉ	ENGLISH
ap, apon (to arrive)	up, upon
bak (bone)	back
be (to go, to be in motion)	be
buhl (pot or kettle)	bowl
bul (to boil)	boil, bubble
cun (medical science or knowledge)	ken, cunning
cha (to say)	chat (Spanish <i>charla</i>), chit-chat or prattle
chab (arrow—pronounced <i>shat</i>)	shaft
{ chah (cinder)	char (e.g. charcoal)
{ chahir (to turn into cinders)	
chek (to conquer)	check
chet (granary)	chest
chip (little finger, youngest son, a small thing)	chip
chop (to cut in pieces)	chop
chow (root of <i>chucab</i> —violence)	shock
chuk (to cover, to hide)	chuck
chun (the hard interior part of a thing)	chunk
hach (to cut, to sever)	hack, hatch, hatchet
hel (to call)	hail
hiz (to hiss)	hiss
hop (to pile up)	heap
hububa (to brandish a sword or lance)	hubbub
il (misfortune, evil)	ill
lum (to mass, pile up)	lump
opon (to open)	open
rak (to rip or rend)	rake, rack
relic (a thing which is left)	relic

QUICHÉ	ENGLISH
run (to run with a murmur, as water)	run
ruz (hurried)	rush
ton (to sound a drum)	tone (Latin <i>tono</i> , to sound; French <i>ton</i> , tone)
toy (a ball for playing)	toy
tun (trumpet)	<u>tune</u>
tur (to overthrow)	<u>tūrn</u>
tzip (a drop of water)	sip
{ vach ¹⁹ (face in front)	watch
{ vachqueher (to be vigilant)	
vin (to gain)	win
vip (noise made by a switch)	whip
xar ²⁰ (to open, as the legs, scissors, compass)	shear, shears

Many of the foregoing words and others of the Quiché language have survived and are still to be found in related or identical forms in the Latin, Greek, Dutch, German, Scandinavian, the Romance languages, and other modern as well as in medieval European languages of Aryan or partly Aryan origin.²¹

¹⁹ V is pronounced like *w*. Brasseur, *supra*, p. 3.

²⁰ X in Quiché is pronounced as *sh* for the reason, as stated by Brasseur, that "the sound of the French *ch*, the English *sh*, which is equivalent [to the foregoing], not existing in the Spanish language, the writers of that nation adopted in Central America and Mexico the letter *x* to express this sound, which is equally common to the languages of those countries." *Supra*.

²¹ Among many other survivals may be mentioned:

QUICHÉ	ENGLISH
han (when)	when (Spanish <i>cuan</i> do; German <i>wann</i>)
in (first personal pronoun)	I (Flemish <i>ik</i> ; German <i>ich</i>)
in (to add, to increase)	in (Latin <i>in</i> ; German <i>ein</i>)

Continued on page 228.

There are also certain esoteric Quiché words,—referring to certain vital human functions, which are kept concealed among nearly all races,—words which are still in use in a more or less secret way in the English language in the same form among the lower social classes,—and which have come from a common source with the Quiché.

QUICHÉ	ENGLISH
lam (to stop, to impede)	lame (Danish <i>lame</i> , to halt, to arrest)
lug (to pull, to incline)	lug (Danish <i>lude</i> , to incline)
xac (to open as scissors)	scissors
xakaba (to obscure)	shadow, shade (Flemish <i>schaduw</i>)
xato (enough)	satisfy (Latin <i>satis</i>)
rip (to extend, to stretch)	rip
rir (to make a noise like a shuttlecock)	roar (French <i>rire</i> , Spanish <i>reir</i> , to laugh)
tziba (to write)	scribe (Latin <i>scribere</i>)

The Quichua *ri* (to go) reappears in the Spanish *ir* (to go). The transposition of letters, perhaps the dropping of initials or terminals, is a common circumstance in the evolution of speech. The same root in the graphic application by primitive man of descriptive abstract ideas to material objects and actions appears in the Spanish *rio* (river), *correr* (to run), and the English *run* and *river* itself.

Water was probably in primitive speech *wawa*,—as elemental as *mama*, common to all people and even to some animals, as the calf, the lamb. *Walla* (water) of the North Coast Indians (as in *Walla Walla*, many waters) is the same word. From *wawa* on the one hand comes the Latin *aqua*, the Spanish *agua* (pronounced *awa* in Peru), Quichua *yacu*,—on the other, *water*,—illustrating the process of differentiation of speech and formation of language.

XXX

THE ARYAN PLACE-NAME SUFFIX IN MEXICO AND PERU

IN Alaska the terminal syllable *-na* or *-ana*, as in Tananá, Susit(a)na, etc., signifies place, locality. In the Quichua of Peru and the Aymará of Bolivia this suffix has the same use,—as in Copacabana, Chiguana (Bolivia); Lunahuaná, Camaná (Peru); and the ancient Tlapallan of Yucatan and Peru (Lambayeque).¹ This is a remnant of the old Aryan *sthana*; old Iranian *stana*, place. In Hindu, or modern Indo-Aryan, it is *thana*, and in modern Persian, *s'tan* or *istan*.²

The same form appears in our own place-names,—Indiana, Montana, Louisiana,—and in its modified form, as it has been taken from the speech of the people and written down by geographers, it is recorded in the highlands of Badakshan, of Iran, and Turkestan, in Erivan (Armenia), among the mountain valleys of Afghanistan and Beluchistan, and upon the plains of Hindustan. From Asia to such places in America as Aztlan, Yucatan, Copán, Tuxpan, Ixtlan, and a hundred other points on the Pacific side of Mexico and Guatemala, dotted thickly about the

¹ R. Cúneo-Vidal, "Linguística Peruana," *Bol. Soc. Geog. de Lima*, XXXI, (1915), 2nd quarter, 115. *Vocabulario Poliglota Incaico*, compiled by Franciscan Missionaries (Lima, 1905).

² George A. Grierson, "Indo-Aryan Languages," *Encyc. Brit.*, 11th ed. *-Na* in the Athapascan (Hupa) likewise signifies place or position. P. E. Goddard, *Handbook of American Indian Languages* (Bureau Am. Eth. Bul. 40, Pt. 1), p. 113.

west coast as though marking the landing places and first settlements of the ancient immigrants,—this Aryan symbol of domicile, home, country, blazons, as it were, in broad lines across the map of the world the course of migrations of portions of the Aryan race.

This suffix has come to mean the habitat or land of a people; Irán (old Iriána or Airyána) is the *land* of the Aryans; ³ Aztlán, the *land* of the Aztecs.⁴

Teheran, Ramadan, Azerbaijan, Khorasan (in Persia), Tashkurgan (in Afghanistan), Bhutan (a state of north-east India), Turpan (Tibet), Ardahan, Van, Borolan (Armenia, ancient Hayasdan), Nelkan (Siberia), Astrakhan (Russia), Hainan (a large island in the South China

³ "The whole country [Persia, in the inscriptions of Darius] is designated Ariána (Zend, *Airyana*)—"the land of the Aryans"—the original of the Middle-Persian *Eran* and the modern *Iran*." Eduard Meyer, "Persia, Ancient History," *Encyc. Brit.*, 11th ed. Notwithstanding the opinion of some philologists, it seems very likely that the name Ireland or Erin is simply Iran,—*Irland*,—or *Aryaland*.

⁴ "Aztlán, the land whence the Aztecs traced their name and source, cannot be identified." E. B. Tylor, "Mexico, Ancient History," *Encyc. Brit.*, 11th ed. It is probably merely As(ia) land or Eastland,—the eastern land to and from which their ancestors had come in their long voyage towards the rising sun.

S. Percy Smith says (*Polyn. Soc. Jour.*, VII) that about 65 B.C., calculated from the genealogies, the Polynesian ancestor, Te-kura-a-moo, left Atia (Asia) and "went to the east, to the rising sun," as told in the traditions. Smith considers that the place he went to was Java (Hawaiki).

"It would appear probable that the latter [the word Asia] was derived from a . . . root meaning the east or rising sun."—Sir Thomas H. Holdich, "Asia," *Encyc. Brit.*, 11th ed. The locality which first acquired the name, whence it spread until it was used to designate the entire continent, is not known. Once fixed, it was still so called even by colonists who migrated still further east.

A different significance is ordinarily given to the names of the Chinese provinces Hunan, Honan, Yunnan, Szechwan; but it is not at all improbable that the terminal syllable of these words is the Aryan *-an*, and that the words designate "the land" of the tribes which settled them, as Huns, Ceechs, etc. The ancestors of the Huns have often been identified with the Hiung-nu of the Chinese.

Sea), Taiwan (the ancient name of Formosa), Onekotan, and Shiashkotan (Japanese islands) mark indubitably the movement of branches of the race which used this Aryan suffix in the designation of the places where they settled, or contacts with that race, from the Iranian plateau to the Eastern Islands. The same unmistakable Aryan designation of dwelling-place marks the arrival of the race or of its culture in America and is used there with the same frequency and persistency as in Persia and Armenia.

Among scores of other ancient settlements which still bear this mark of the Aryan race are Mazatlan, Tecoman, Tuxpan, Ixtlahuacan, Tomatlan, Tetlan, Zapatlan, Haltetpan, Nochistlan (Mexico), Amatitlan, Cobán, Totonicapán (Guatemala), Copán (Honduras), Tucumán, Malanzan, Utracan (Argentina), Mazan (Peru).

"Most of the Indo-Aryans branched off from the common Aryan stock in the highlands of Khokand and Badakshan."⁵

This Aryan suffix, in place-names which mark the movements and settlements of the race, appears most frequently in the highlands of central and western Asia and in the western half of Mexico. It was brought in successive migrations from central Asia to Japan and thence across the Pacific. It appears in Spokane(e), in the state of Washington (meaning, like *Japan*, the land of the sun). The very scenes which these Aryan or mixed Aryan immigrants looked upon as they landed in the new continent are identified by this characteristic term of locality.

No people ever had a more profound appreciation of the beauties and mysteries of nature. They displayed

⁵ G. A. Grierson, "Indo-Aryan Languages," *Encyc. Brit.*, 11th ed.

their imagination in their poetic names of natural objects and in the magnificence of the sites of their temples. They were lured by the beauties of the new land and the delights of its climate. They were farmers and herds-men, sailors, merchants, miners, and adventurers, who lived in the open air.

In Peru they tamed the wild dog and guanaco and bred the llama and alpaca. Like the pioneers of our own branch of the same Aryan race who settled the West, they were enterprising traders and explorers. They explored far to the north and south and worked the copper mines of Michigan and washed placer gold from the headwaters of the Amazon. They established their capitals on the salubrious plateaus of the cordilleras, as their ancestors had done in Asia. In the exquisite valleys of the Andes, amid the delights of an almost perpetual spring, they built their marvelous terraces and carried irrigation and agriculture to a higher state of refinement than it ever attained elsewhere either before or since.

Land was the lure and magnet of their wars and migrations, as it was of the later Aryans of the United States. The old story of the Paccari-Tampu myth centers on the search for fertile soil. When the golden staff of the "Ayar" Manco Ccapac sank deep into the loam in the cove of Cuzco, the invaders settled there and drove out or enslaved its former owners. It was but a repetition of the Asiatic migrations.

XXXI

ARYAN ADJECTIVAL INFLECTION IN QUICHUA, ESKIMO, AND ENGLISH

IN the Eskimo language the same termination as in English—a vowel followed by a hard or explosive consonant, usually *k* (the same sound is represented in this position by *c*)—is used to give the descriptive or adjectival character to the noun or verb, expressing the quality, condition, state of being, doing, or securing of the thing or action referred to. In this way a verb or noun assumes the functions of an adjective or adverb. This termination as descriptive often appears in the names of places from western Asia to Alaska, Mexico, and Peru.¹ Instead of saying, e.g., “It rains,” the Eskimo says: “It is in a state (or condition) of raining,”—*’si ’allerpog* (rainy). “He stabs himself” becomes “He is in a state (or condition) of being stabbed by himself,”—*kapiwok*. There are innumerable words ending in *-oq*, and the same principle of word formation appears in the Eskimo words *lik*, “in a state of having,” i.e. “supplied”; *wik*, proper; *kuluk*, wretched, and many others.²

¹ The speech of primitive peoples who live in the open,—and whose existence depends on alert physical observation,—tends to be descriptive of natural objects, sounds, colors, and elements; and many substantives and verbs originate in this way and have adjectival inflections. In the process of sophistication these often come to be used in secondary or metaphorical senses. There are many astonishing and often amusing examples of this manner of evolution of language.

² William Thalbitzer, “Eskimo”; *Handbook of Indian Languages*; Introduction by Franz Boas, Bul. 40, Pt. 1 (Government Printing Office, 1911). Note also here other adjectival verbs ending in *oq*. *Id.*, p. 1058.

The same method in the Quichua of converting a verb into an adjectival substantive form appears in innumerable words, of which the following are examples: ³

ruray (to fulfill)	rurac (in the habit of or pertaining to fulfilling or performing)
suchuchuiy (to postpone)	suchuchic (pertaining to or in the habit of postponing)
ricuchiy (to exhibit)	ricuchik (an exhibitor or one of that nature or profession)
yachachiy (to teach)	yachachik (a teacher, i.e. one in the condition of or having the quality or profession of teaching)
huachuy-hucha (luxury)	huachuk (luxurious)

Also note the Quichua *kcapak*, fragrant; *tuytuk*, floating; *asnac*, fetid; *tunkquic*, doubtful; etc.

The same Aryan adjectival inflection appears in such Anglicized Latin words as *frigid*, *rancid*, *torrid*, *torpid*, *sacred*, *plethoric*, *caloric*, *frantic*, *comic*, *patriotic*, and *eccentric*. The termination *-ec*, in Aztec, is merely the Aryan adjectival form common to English and many of the American Indian languages from Alaska to Peru. In Quichua *inti* is the sun, the sun-god; *intic*, pertaining to the sun. The same appears in our word Asiatic. Aztlan, the land of the Aztecs, was probably from the same root as Asia, meaning *east*; and it may be that Aztec is only another form of Asiatic.⁴

³ *Vocabulario Poliglota Incaico, Compuesto por Algunos Religiosos Franciscanos, Misioneros de los Colegios de Propaganda Fide del Perú* (Lima, 1905).

⁴ *Asia* was the ancient home-land of the ancestors of the Rarotongans. This name was preserved in the authentic traditions of the race. Edward Tregear, *Polyn. Soc. Jour.*, XIII, 151.

XXXII

ENGLISH WORDS IN THE MAYA LANGUAGE

WORDS of Aryan origin which survived in pre-Columbian American languages are only traces of what must have been important Aryan contacts or indirect influences which have almost disappeared in the mass of indigenous tongues; just as traces of Aryan art have survived in the evolution of the mass of local native American cultures, and vestiges of white Aryan blood, though overwhelmed in the general darker stream, still appear in the composite indigenous American races. In view of the influence of "stock" tongues of primitive peoples from various sources,—chiefly from Asia by way of Bering Strait and the Aleutian Islands,—who had inhabited America for thousands of years before the later migrations of the white, or almost white, Aryan or mixed Aryan race,—and the tendency of language towards differentiation and change of form,—the wonder is not that so few but that any words of undoubted Aryan origin have survived in the American tongues.¹

¹ In "Hawaiki—the Whence of the Maori," *Polyn. Soc. Jour.*, VIII, 46, Mr. S. Percy Smith speaks of "the many Aryan words in their [the Polynesians'] language." He also raises the query: "Whence do they derive the large number of Semitic customs they possess? . . . Where did they learn words of the *South American* languages? I will venture to offer a brief theory to account for these . . . At a very early date, the Polynesians occupied inland India and were found there by the Aryan invaders; these two peoples resided side by side for long years, until the pressure

The tendency to change is so great or so uneven,—as in cases where a language remains of fixed form in one locality and evolves into a different form in another, or where both become subject to different influences and develop in different directions,—that the inhabitants of some English counties cannot understand their fellow Englishmen in other counties.² Among the Tibeto-Burman dialects in southeastern Asia “instances are said to be on record where one small tribe has changed its language in the course of a couple of generations so as to be unrecognizable.”³

In Africa the tendency to variation,—the effect of environment,—is so great that the black negro race has produced in some places tribes of giant athletes seven feet in height, “some of them more,” such as the Ruanda tribe

of the Aryans forced the Polynesians eastward. Logan tells us that long anterior to the Aryan irruption into India the country now called Baluchistan was occupied by a Semitic race. If so, the Polynesians were their near neighbors and from them learnt their undoubted Semitic customs. To voyagers who have penetrated the Antarctic seas, a voyage from the east of Polynesia to South America would present no difficulties. They took their language there, and left some of it behind in exchange for the *kumara* (*Convolvulus batatus*) which they brought back with them, for De Candolle tells us this tuber is a native of South-Central America. . . . The Quichua name for the *kumara* is said to be *umar*.”

² By this time there probably would have been half a dozen languages spoken in different sections of the United States if it had not been for modern inventions,—railroads, newspapers, automobiles, paved roads, telephone, radio, telegraph, etc. Should George Washington appear among us today, we should probably be very much astonished at the way he pronounced many words, and many of us would even have some difficulty in understanding his accent.

³ Sten Konow, “Tibeto-Burman Languages,” *Encyc. Brit.*, 11th ed.

As an illustration of how primitive man adopts certain words as having a concise but arbitrary and more or less technical meaning, I remember very well my brothers and myself, when we were small boys catching grasshoppers for trout-bait, had technical names for three certain well-defined species of grasshoppers, viz., “big-black,” “big-yellow,” and “tolerably big.” These very general words thus came to have a new conventional

of two million people; and tribes of forest-dwelling pigmies, "the men less than four feet tall, the women about three feet nine inches,—little more than animals" in intelligence.⁴

The tendency of language to differentiate is further shown by the "mix-up" of negro African dialects and distinct tongues, "numbering, according to different authors, anywhere from 450 to 843."⁵ Even in a confined area like the Andaman Islands, the Negritos of Little Andaman speak a language so different from that of the same race on Great Andaman that "even a thorough knowledge of the latter is of almost no use in an attempt to learn the former."⁶ A very good living example of the process of change is the Spanish *hasta luego* (*au revoir*), which in Brazilian Portuguese becomes *até logo*.

meaning in our *tribe*, but were lost on account of the dispersion of the tribe and changed environment.

As boys with considerable leisure,—living in the country in a lovely secluded valley among the mountains,—we encountered, in a minor way, the experiences of primitive peoples. There is a certain parallel in the workings of a child's mind and those of a savage's; and, as the human embryo in its process of development goes through the various forms from which man was evolved, a group of adventurous boys among the wild woods and streams tend to reproduce in miniature the experiences of the Cro-Magnon cave-dwellers. Their enterprises, exigencies, and occupations, their mental and temperamental reactions, and the means employed in the solution of their primitive problems seem prompted by some obscure psychological inheritance from remote ancestors who lived as Cædmon describes the Anglo-Saxons,—“by hunting in winter and, in summer, by fishing in the sea.”

Feuds, caused by the invasion of chincapin woods claimed by other boys, illustrated quite vividly the manner in which wars arose between tribes of early man over pastures or hunting grounds.

⁴ Rev. W. J. W. Roome, F.R.G.S., quoted in *Literary Digest*, May 15, 1926, p. 38. The same tendency to variation exists and operates in the human species as in plants and animals; for examples of the latter, note the widely varying types,—all groups from the same comparatively recent stocks,—of dogs, pigeons, poultry, or roses.

⁵ Roome, *supra*.

⁶ A. R. Brown, *The Andaman Islanders*.

In Argentina, the great growing state of the Plate River, the surging forces which are developing its natural riches are also presenting the spectacle of a new language in process of formation,—in mixture of Guarani Indian words and linguistic structure with the colonial Spanish, the impact of a great Italian immigration, and the new forms evolved from the stress of new conditions.

The extent of the infusion of Aryan speech in ancient America is obvious in view of the great number of pure Aryan words and forms surviving at the time of the Spanish conquest,—especially when the illuminating comparative fact is considered that the various European branches of the Aryan tongue had departed so far from the original speech and had become so widely differentiated as to be alien to each other. The persistence of early Aryan influences, which have left so many traces in ancient America, appears more clearly when it is considered that “it is only in exceptionably favourable circumstances that cognate languages are so preserved during long periods as to render it possible for scientific analysis to prove their relationship with one another.”⁷

It is not strange that such variations exist between the several American composites,—Quiché, Quichua, Moche, Maya, etc.,—or that more of the Aryan element has not survived in them, for the same process differentiated the speech even of the Aryan tribes themselves in Asia. “The literary records of the latest times of this invasion [Indo-Aryan invasion of India] show us one Indo-Aryan tribe complaining of the unintelligible speech of another, and

⁷ Theodor Nöldeke, “Semitic Languages,” *Encyc. Brit.*, 11th ed.

even denying to it the right of common Aryan-hood.”⁸

The ancient Quiché tongue of Guatemala, the Quichua of the Peruvian Andes, and the Moche of the north Peruvian coast (Yungas), though widely differing from each other, contained many resemblances of structure and words common to them all. The same statement might include other American tongues, many of which, like those just named, contain Aryan words as well as some features of Aryan construction; e.g. in Quichua, as in Greek,—and in many English words,—*a-* as a prefix expresses the negative: *kal’o*, speech,—*akal’o*, without speech, mute.⁹ (English examples: aseptic, atheist, azoic, ataxia, etc.).

Through all the vicissitudes of migrations which circled the globe by opposite routes, great numbers of words from a common prehistoric primitive Proto-Aryan tongue survived the changes of occupation, of climate, the diverse racial mixtures, geographical phenomena, and the contact with strange plants and animals, and have retained in both the English and the Maya tongues,—especially the

⁸ G. A. Grierson, “Indo-Aryan Languages,” *Encyc. Brit.*, 11th ed.

The Indo-Aryans “marched south into what is now eastern Afghanistan. Here some of them settled, while others entered the Punjab by the valley of the river Kabul. This last migration was a gradual process extending over several centuries, and at different epochs different tribes came in, speaking different dialects of the common language.” *Id.*

⁹ José S. Barranca, *Bol. Soc. Geog. de Lima*, XXXI (1920), 2nd and 3rd quarter, 163. This author also cites many other features of construction which, he asserts, are the same in Quichua as in the “classic tongues.” The gradual change “in the course of time” of *m* to *n*,—as from *ma* to *na*, he refers to as “a thesis which also can be proved in the classic tongues,” and adds: “This brings us to considerations of the highest interest . . . the solution of obscure lexicographic questions. There are a multitude of languages (Kitsua, Aymará, Mokoá, Sikita, Kauki, etc.) which have a marked similarity in the possessive pronoun, first person, differing only in the form of the vowel which serves as a suffix; *m* and *n* remain invariable in these groups (*n* being the modern form): *na*, *ni*, *nu*,” etc. To these examples the learned Peruvian scholar might have added the English *my*, Spanish *mi*.

spoken languages,—similar or identical forms and significations marking unmistakably a common origin for at least a part of the various influences which have come into the making of these forms of speech.¹⁰

With the language must also have come some of the blood and primitive culture of the ancient Asiatic stock, marking the kinship of these races. The great difference is that England and its offshoots, such as the United States, have retained, to much greater extent, the purity of blood and hence the language of the ancient white Paleo-Aryan race.

Among the multitude of words of the Maya tongue found in the various branches of the Indo-European languages, the following may be compared with their English counterparts:¹¹

MAYA	ENGLISH
bechcal (<i>ch</i> here pronounced as <i>k</i> ; to call by a sign of the head)	} beckon
bechkab (to call by a sign of the hand)	
bek (elongated and pointed)	beak
bin (to go, to put oneself in motion)	being, been
bitun (bitumen)	bitumen (from the Latin <i>bitumen</i> ; French <i>béton</i>)
boc (odor, smell)	bug

¹⁰ J. Macmillan Brown, "Languages of the Pacific," *Bishop Museum Occasional Papers*, says that seventy-five percent of Fornander's citations of root words as being common to the Indo-European and the Polynesian tongues "are on the whole correct and even scientific." Brown then proceeds to add many similar comparisons of his own, and says that he has "hundreds," e.g., Polynesian *awiki*, to hasten; English *quick*; French *vite*; Latin *vivere*, etc. (The English *awaken* seems closer.—M. P.) Polynesian *ruma*, house; English *room*.

¹¹ Brasseur de Bourbourg, *Etudes sur le Système Graphique et la Langue des Mayas* (Paris, 1870), Vol. II, pp. 125 et seq.

MAYA

ENGLISH

bok (a paste, such as wax or beaten eggs)	bog
buh (to bud)	bud
buk (to cover the female by the male; to make fire by rubbing sticks together)	buck
buth (filled up)	but, butt (see also French <i>bout</i> , the end)
can (to be able to)	can
chaach (chew)	chaw
chab (to heap up)	shape
chak (wrinkled, corrugated)	shag, shaggy
cham (a molar tooth, to pound or grind,—as maize)	champ
chap (to break and roughen)	chap
cheeh (to laugh)	cheer
chin (a small stone)	shingle
cun (to conjure, to bewitch)	ken, cunning, conjure
hack (separated, cut into small pieces)	hack, hatch (to mark or engrave in lines), hatchet
hol (an opening, a passage)	hole
he (pronoun, third person)	he
hech (a girdle or enclosure made of objects placed in line)	hedge
hechcab (to open, to bud forth)	hatch
hich (to tie, to attach, to fasten)	hitch
hok (to attach, to bind firmly)	hook
hub (in confusion, in disorder)	hubbub
hum (sound, buzz, murmur)	hum
hutul (to fall into a confused heap)	huddle
ilil (bad, evil,—evidently an example of the repetitive superlative)	ill

MAYA	ENGLISH
kaw (crow,—an onomatopœic word)	caw (Latin <i>corvus</i>)
kil (to wound, to cause pain)	kill
kut (to bruise, to break)	cut
lac (a thing contained or enclosed)	lake
lap (to fit into, to take into)	lap
letz (to diminish)	lessen
liclili (ordinarily, usually)	likely
litz (a drop, a small quantity)	little
loch (a hollow)	loch (a Scotch word), lock
lok (to confine)	lock
lou (on bended knee, abased)	low
luum (earth)	loam
luz (to free)	loose
mach (to seize with the hand)	match (to contend, to fight)
machkabil (marriage)	match
mat (equal, companion)	mate
max ¹² (to pound, to bruise)	mash
met (joined in a circle)	meet, met
mix (pronounced <i>mish</i> ,—never)	miss
much (a pile, a group, a heap)	much (Spanish <i>mucho</i>)
mum (to masticate, to ruminate)	mum (ruminating, keeping silent)
mux (pronounced <i>mush</i> ,—to pulverize, to pound maize in a mortar)	mush
nah (near, close by)	near (English pronunciation, as contrasted with the American, <i>neah</i> , similar to the Maya)

¹² X was used by the Spanish compilers of the Maya tongue to represent the sound *sh*. Brasseur, *Dict. Maya*, *supra*, p. 8.

MAYA	ENGLISH
nap (to grip, to pinch, to press between two objects)	nab, nip
neb (point, extremity, beak, etc.)	neb (beak), nub
nej (near, close by. The Maya sound <i>j</i> or <i>dj</i> was written <i>ñ</i> by the Spanish conquerors.)	next
nuth (hard, knot, knotted)	knot, nut
pach (covering, protection)	patch
pep (a narrow crack or crevice)	peep
pick (to gather, as fruits or flowers)	pick
poch (to trespass, to offend)	poach
pok (a pustule)	pox
pol (the head)	poll
póop (to break open with a noise)	pop
pot (a hole, an opening)	pit, pot
pul (to drag or carry)	pull
tab (to bind, to attach)	tab (a flap, string, or strap for attachment, etc.), tape
tak (to fasten, to attach)	tack
tak (to take, to seize)	take
teel (instrument, tool)	tool
tiil (to turn up or over)	till (as the soil)
tilo (there, to that point)	till (up to, until, as far as)
tip (point, extremity)	tip
tip (to set in motion, rapid movement)	tip, tap
thah (to fall, as a liquid, drop by drop)	thaw
than (praise)	thank
thanal (a chief)	thane
thin (thread, filament)	thin

MAYA

ENGLISH

to (particle, signifying addition, increase)	to
top (to pile in a heap, piled up)	top
uan (need)	want
uay (in this direction, here)	way
uil (obligation, determination)	will
xiith (<i>x</i> pronounced <i>sh</i> ,—sheet)	sheet
xith (pronounced <i>sheath</i> ,—to unfold as a bud or blade of grass)	sheath
xoc (pronounced <i>shock</i> ,—a collision, a blow)	shock (Spanish <i>choque</i>)
xoth (pronounced <i>shot</i> ,—to close, to press together)	shut
yet (and,—conjunction indicating something to be added to what has preceded)	yet
yuk (joined, fastened together)	yoke
zap (pith, flavor)	sap
zeb (rapid, precipitate)	zip (colloquial)
zue (sweet)	sugar (Spanish <i>azúcar</i>) ¹⁸

Equally curious and showing the relationship of the English and the Maya,—more intimately connected with

¹⁸ MAYA

ENGLISH AND OTHER LANGUAGES

ben (descendant)	ben (Hebrew,—descendant)
baab (to immerse in water)	bathe
baal (great, illustrious)	Baal (Phœnician god) and Baalbec (his high-place)
lax (companion)	lad
lee (leaf of a tree)	leaf
thoch (to prick)	thorn
thon (lying or fallen on the soil)	down
uacun (to carry)	wagon
ualkal (to turn, to change)	walk
xuthen (a basin or coarse vase)	scuttle

the private and personal life of the people,—there are in the Maya, as in the Quiché, esoteric words of the same root and meaning as the English, not found in modern dictionaries,—at least not in the secondary or, so to speak, slang sense in which they came to be used to designate sexual and other bodily functions. Also, as in the Quiché, many of the Maya roots are found in identical or related form in the other Indo-European tongues.

XXXIII

INDO-ARYAN CASTE IN PERU

"THE division of castes [of the Incas] . . . was as precise as that which existed in Egypt or Hindustan."¹ The Ayar-Inca aristocracy or ruling class of the Peruvians was classified in five orders. The first order consisted of persons of royal blood.² The ceremony of the *huaracu*, by which at the age of sixteen the high-caste youths were examined and tested as to their fitness in strength and courage to be admitted into the full rights of fellowship of the Ayar brotherhood and to receive the insignia and investiture of manhood, resembled that of the Indo-Aryans.³

At about sixteen years of age the boys of the Indo-Aryan castes⁴ on being admitted to the full rights of manhood and being "born again" by passing through an elaborate

¹ Prescott, *Conquest of Peru*, I, 125.

² Following them came the priesthood; the Amautas (wise-men, teachers, and keepers of the traditions and quipus,—*quipucamayocs*); the knights and military chiefs; the civil officials.

The orders frequently overlapped. The chief priest was usually of royal blood, perhaps a brother of the reigning Inca. The high military officers were often members of the royal family. The great conquering Incas were themselves the commanders-in-chief of their forces in the field.

As Peru was a despotic socialist state there was but little private business. Below the Ayar orders and separated from them by a social gulf was the mass of the common people, the original indigenous stock of the country. The Quichua and Aymará masses tilled the land, raised and cared for the live stock, worked at the mechanic arts, and performed all classes of manual labor. All this was under the strict supervision and control of the Ayar officials.

³ Rivero and Tschudi, *Peruvian Antiquities*, pp. 78-79. H. Julius Eggeling, "Brahmanism," *Encyc. Brit.*, 11th ed.

⁴ Eggeling, *supra*.

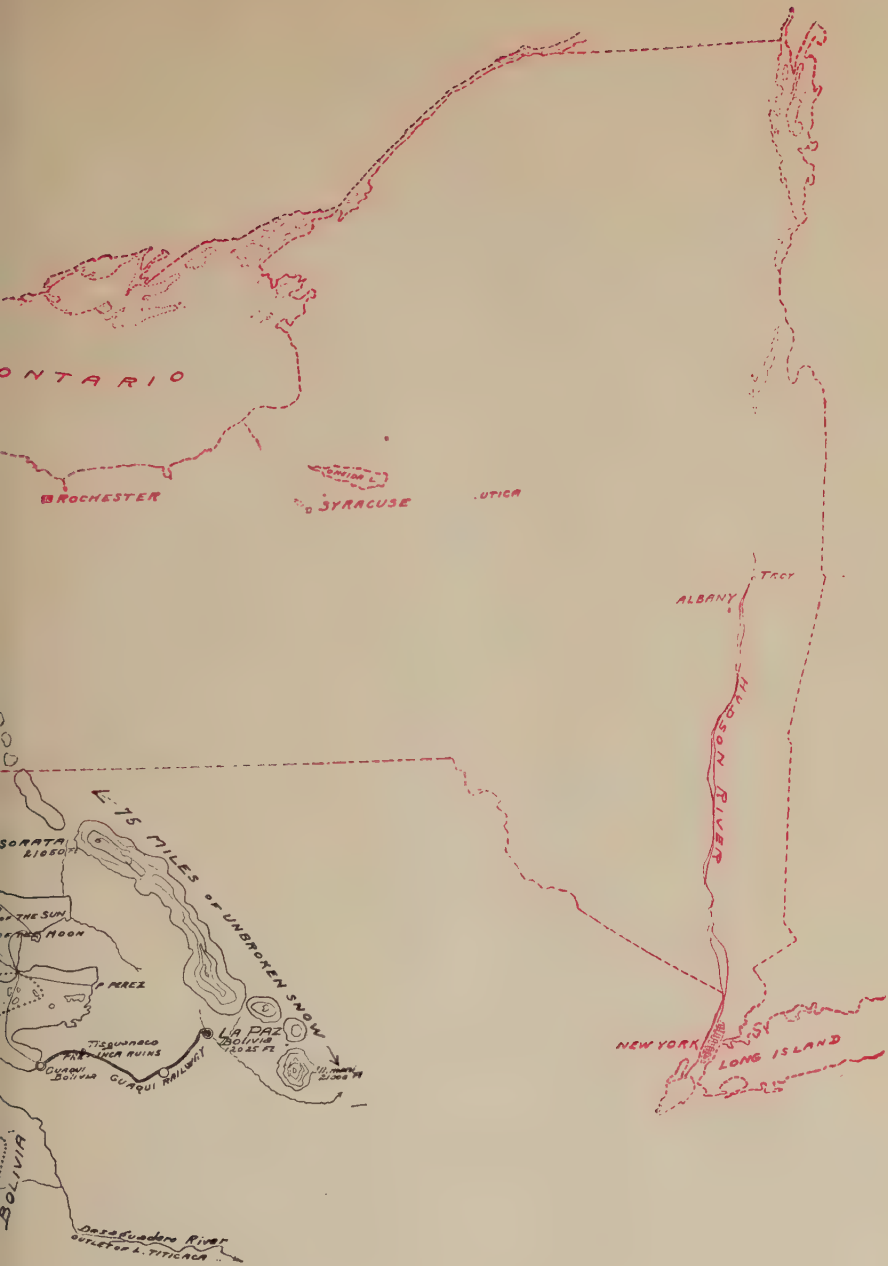


MAP OF THE LAKE TITICACA

A sketch of New York state, with Lakes Ontario and Oneida, is placed alongside the lake in sections before the railroad was built, are regularly operated by the railway exception, however, must be made of the little lake of Punrún seven or eight miles Punrún is 14,100 feet above sea-level.

The railroad to Cuzco passes along the prehistoric highway of the Inca Empire. In canota. In this Gap is the pond, or tarn, of La Raya from which the waters flow up drained into Lake Poopo. Although the last named lake has no outlet, the region in rising to a height of 17,994 feet, are familiarly close at hand to the passengers by tra

Map prepared by the Southern Railway of Peru.



ION IN PERU AND BOLIVIA

comparison as to area. Several steamboats, one of them built in England and transported to Lake Titicaca, which is said to be the highest navigated body of water in the world. An error de Pasco, Peru, which is navigated by the launches of the Vanadium Corporation.

summit of the Andes in the Battle Gap of La Raya on the very flank of the peak of Vilcande to the Amazon and the Atlantic, and upon the other to Lake Titicaca, which in turn is thin the watershed of the Pacific. Although in the tropics, the snow-fields of Vilcanota, te, 20,180 feet in height, is a little further off the line to the north.

ritual of initiation, were invested with the "sacred cord, ordinarily worn over the left shoulder and under the right arm, and varying in material according to the class of the wearer." "The distinctive badge of a member of the three upper castes was the sacred triple cord or thread (*sūtra*)—made of cotton, hemp, or wool, according to the respective caste—with which he was invested at the *upanayana* ceremony, or initiation into the use of the sacred *Sāvitrī*, or prayer to the sun (also called *gāyatrī*), constituting his second birth. . . . The Arya was thus a *dvi-ja*, or twice-born."⁵ In like manner the noble youths of the Ayar-Incas at about the same age, after making their sacrifices, were given a similar badge of manhood,—the *huaracu*. This was a cord "made of aloe fiber and the sinews of sheep [llama], the aloe fiber being like flax. *It was said that their ancestors, when they came forth from Paccari-tampu, wore them.*"⁶

The young Ayar noble of Cuzco first sought from the Inca permission to make his sacrifice. Having received the Inca's consent he spent a night in communion with his ancestral god on the hill of *Huanacauri*, huaca of the chief ancestral spirit, worshipped by the Ayar Ayllus, or clans.⁷ Corresponding to this, the first and most important of the elaborate observances of the initiation into his caste of the noble Indo-Aryan youth was the rite of conducting the boy to a spiritual teacher.⁸

⁵ Eggeling, "Hinduism," *Encyc. Brit.*, 11th ed.

⁶ Molina, "Fables and Rites of the Yncas," in *Narratives of the Rites and Laws of the Yncas*, ed. C. R. Markham (Hak. Soc.), pp. 38-39. Italics mine. M. P.

⁷ Molina, *supra*, p. 35. There is a ceremony somewhat similar to this on the assumption of manhood by the youths among the Okanogans and other North American tribes.

⁸ Eggeling, *supra*.

The ceremonial of investiture of the youths of the royal and other noble and aristocratic castes of the Inca state, while differing somewhat in detail, was substantially the same as that observed by the three castes of the Indo-Aryans. The lower caste of the Hindus, and of the Quichuas, consisting of the mass of the darker indigenous people, not being of Arya or Ayar blood, was rigidly excluded from marriage or other intimate association with the higher orders in India and Peru alike and could take no part in the ceremony. Both the Indo-Aryan and the Ayar-Inca youths were shorn, clothed in their ceremonial garments, received the sacred cord and were admitted into full Arya (Ayar) fellowship upon completing certain sacrifices and making a prayer to the sun, as provided in their respective rituals.

"This ceremony being the preliminary act to the youth's initiation into the study of the Veda, the management of the consecrated fire, and the knowledge of the rites of purification, including the *sāvitrī*, a solemn invocation to *Sāvitrī*, the sun (probably *Saturnus*),—as a rule the verse Rîgv. iii. 62. 10, also called *gāyatrī* from the meter in which it is composed,—which has to be repeated every morning and evening before the rise and after the setting of that luminary, is supposed to constitute the second or spiritual birth of the Arya."⁹

The investiture of the Inca youths was likewise an elaborate and impressive ceremony in which the entire royal, and noble, and priestly castes of the people took part. It was held at the feast of *Ccapac Raymi* in the

⁹ Eggeling, *Brahmanism*, *supra*.

month of December,¹⁰—the summer solstice in Peru,—corresponding to the month of June in the Northern Hemisphere, and lasted for many days. A portion of this elaborate ritual was, as in India, the care of the sacred fire, fasting and purification, offering sacrifices with the sacred fire,¹¹ and with this ritualistic prayer: “O Huanacauri, our Father, may the Creator, the Sun, and the Thunder ever remain young and never grow old. May thy son, the Inca, always retain his youth, and grant that he may prosper in all that he undertakes. And to us, thy sons and descendants who now celebrate this festival, grant that we may be in the hands of the Creator, of the Sun, of the Thunder, and in thy hands.”

The youths and chiefs joined in this prayer, and, as in India, when the Aryan youths had made the prayer to the sun, the Ayar-Inca youths were then invested with the sacred cord,—emblem of full membership in the Ayar brotherhood.¹² The priest, on presenting the *huaracu*, said: “Now that our father, Huanacauri, has given the

¹⁰ “During the first eight days of the month [Dec. 22 to Jan. 22] all the relations were busily employed in preparing the *usutas*, or shoes made of fine reeds almost of the colour of gold, and the *huaras* of the sinews of llamas, and in embroidering the shirts in which the youths were to appear when they went to the hill of *Huanacauri*. The shirts were made of fine yellow wool with black borders of still finer wool like silk. The youths also wore mantles of white wool, long and narrow, reaching to the knees. They were fastened round the neck by a cord from whence hung a red tassel. The youths were clothed in this dress, shorn, and taken to the great square by their parents and relations. The latter wore yellow mantles with black plumes on their heads from a bird called *guito*. Many young maidens also came, aged from eleven to fourteen, of the best families, carrying vases of chicha. They were called *Nusta-calli-sapa*, or princesses of unequalled valour. The images of the deities were brought out, and the youths and maidens, with their relations, were grouped around.”—Markham, *The Incas of Peru*, pp. 129-30.

¹¹ Markham, *supra*, pp. 128-31.

¹² Molina, *supra*, p. 38.

huaracus as a sign of valor, live henceforth as brave men." On receiving the *huaracu*, the youth was given a permanent name as a man and member of the Ayar ruling class.¹³

¹³ Molina, *supra*, p. 53.

Markham translates *huaraca* (the spelling of the word used by Molina) as "sling" (note, Molina, *supra*, p. 38). In one place Molina speaks of the *huaraca* as a sling (p. 47). But the *huaraca* is mentioned among the ritualistic articles of clothing and decoration prepared by the parents and relatives of the youths for the ceremonial investiture (p. 36). In distinction from this the sling is specifically mentioned in another connection as one of the weapons of manhood formally presented to the young noble by his "principal uncle,"—in the public square in the presence of "all the huacas" (idols) (Molina, p. 45), many days after the presentation by the priests of the *huaraca* as the initial sacred insigne of membership in the Ayar brotherhood (Molina, p. 38). The arms presented to the youth by his uncle were a shield and a club "with a metal knob at the end."

At one stage of the ceremonies of initiation, the youths were flogged with the *huaracas* and *yauris* (staves) to test their valor and hardihood. The *huaraca* is mentioned as being "worn" by their ancestors (Molina, pp. 38-39). The "twice-born" Indo-Aryan youth who received the sacred cord, as the insigne of his "second birth" by the ceremonies of admission to the status of Aryan manhood and eligibility for membership in one of the three Aryan castes, wore the ancestral emblem, by the strict requirement of the religious ritual, "over the left shoulder and under the right arm" (Egeling, *supra*), as may be seen in India today. On the return from Huana-cauri, in the progress of the Inca ceremonies, the Ayar-Inca initiates "carried the *huaracas* on their heads" (Molina, p. 39).

If the *huaraca* were a sling and, as such, the sacred emblem of the caste in the cruder stages of the Ayar culture, this might throw some light on the origin of the "sacred triple cord," or "thread," of the high-caste Hindus,—as a conventional, ritualistic survival, in the refinements of the Indo-Aryan civilization, of a tribal weapon adopted as the symbol of their caste.

But the *huaraca*, and likewise, probably, the sacred triple cord (*sūtra*) of the high-caste Hindus, was of a different nature and origin. Garcilasso de la Vega (*Commentarios Reales de los Incas*, Madrid, 1723, pp. 200-204) gives the word as *huaracu* and defines it as the "*insignia de varón*" (badge of manhood). Like Molina, Garcilasso mentions (p. 202) as an entirely different feature of the ceremonies—incident to the initiations of the youths in the Ayar fellowship—the sling (which he designates by the Spanish word *honda*), as one of the arms conferred upon the young "Knights." As entirely distinguished from this he describes the *huaracu* in detail (p. 204).

The name, he says, is derived from *huara*, breeches. In one place Molina (p. 40) also refers to the *huaraca* as breeches. The insigne was conferred upon the youth upon his arrival at the age of puberty, and consisted of "a cord of the thickness of one's finger" which was fastened around the boy's

As the *huaracu* was the insigne of virility, and its bestowal marked the acceptance of the youth as personally qualified in age, courage, and strength, for membership in the Ayar castes, or orders, in the Inca state, the piercing of the lobe of the ear and its gradual enlargement to receive the huge golden ear plug was the outer symbol of the aristocratic castes. On account of this mark which the Incas gave themselves, the Spaniards called these nobles Big Ears (*Orejones*).¹⁴

waist and tied "back of his kidneys." In front a small triangular piece of woolen cloth was sewed to the cord. Two points of the triangular cloth were extended lengthwise along the cord and sewed to it, and the third point or corner of the cloth was passed between the thighs and fastened to the cord on the back,—so that "*quedaba el paño delante de los vergüenzas*," and the man, "though he took off his clothes, would be sufficiently and honestly covered." (Garcilasso, *ibid.*, p. 204.) Molina (p. 40) says the cloth was red and the cord made of the sinews of sheep (llama) and aloe fibers.

Garcilasso says (p. 204): "This name *huaracu* . . . contains the whole signification of this solemn ceremony which we have described,—in which the man who was worthy of wearing it was eligible for all the other insignia, honors, and dignities which then or thereafter could be given (or earned?) in peace or war."

In the Rarotongan legend of Tai-te-ariki and of his ordination as chief, mention is made of "girding him with the scarlet belt."—S. Percy Smith, *Polyn. Soc. Jour.*, VIII, 35.

¹⁴ This was one of those inconsistencies of paganism which coupled a most exalted conception of God as an omnipotent spirit with the childish worship of the stone image of a falcon as the god's idol or "brother." A royal aristocracy which claimed to be descended from the god,—lords of a rich empire,—identified its members in a solemn ritual by splitting their ears, much as we mark hogs and cattle.

As to the custom of enlarging the ears (Peruvian *Orejones*) in the Carolines, see an article by F. W. Christian, "Te-taringa-roa: A Curious and Widespread Custom," *Polyn. Soc. Jour.*, XXII-XXIII (1913-14). The same custom was practiced in Easter Island. "The Polynesian conquerors under Hotu-Matua" called the aborigines, on this account, "Taringa-Roro'a or Long-Eared Folks. . . . This seems to point to an early Hindu-Malay element in the Peruvian civilization." Christian, *ibid.* It also gives a hint, at least, that the people who erected the megalithic statues and Cyclopean altars on Easter Island, which so much resembled the megalithic statues and masonry at Tiahuanaco on Lake Titicaca,—a people who apparently were found upon the island by the later Polynesian migration,—were related to the Peruvians of the megalithic age.

As among the Hindus and Jews, the laws and culture of the Incas were in constant flux. Customs that existed under one Inca were abolished by another,—or gradually fell away from apathy or aversion. Under a weak or vicious ruler public morals were corrupted; the people neglected Viracocha and worshipped the idols of strange gods. A strong ruler reestablished the old religion or introduced wholesome reforms. At times the state fell into decay. The discipline of the people was relaxed and they were the victims of invaders. Under some great new leader, such as Ayar Manco or Rocca, discipline was restored, the old religion and the rule of the old line reestablished.

A cult or custom of which a record has been preserved may have existed only for a short time under a few rulers or only in certain localities. Others, such as the rules of caste, were so fundamental in the constitution of the state that they persisted with greater or less rigidity even in times of disaster, when the old ruling class was in exile or seclusion, and reasserted their influence and power as the social law from time to time, until the entire culture of the Incas and the ruling race itself were finally lost in the fearful wreck and chaos of the Spanish conquest.

Like the college of Augurs at Rome and probably from the same Aryan origin, there was, also, in the Inca hierarchy a distinct class composed of the diviners, called Huatuc. The special order who divined, as the Greek and Roman augurs, from the flight of birds and by examining the intestines of animals, bore the professional name Hamurpa.¹⁵

¹⁵ Markham, *Incas*, etc., p. 107.

Each ruling Inca and many other individuals had their personal idols, called *huanqui*, brother,—which were kept in their houses, like the Roman *lar*, and buried with them.¹⁶ This *huanqui* was an enchanted and divine thing which bore a peculiar, occult, and more or less subtle relationship to its host. There were many *huanquis*, each with distinctive attributes,—the personal and private god of its “brother” who held secret communion with it.

As among the Indo-Aryans, the wife and concubines of the Ayar-Inca were sometimes buried with him.¹⁷ When Tupac Cauri died of the plague at more than eighty years of age, his son, the new Inca, gave him a very sumptuous funeral and, as a mark of affection and to comfort him in the after life, interred with him “his legitimate wife and his most beloved concubines.”¹⁸ Both on the coast and in the sierras of Peru, as in India, women frequently killed themselves when their husbands died in order that their souls might be with the deceased in Paradise.¹⁹

The Peruvian Ayllu,—lineage, or patriarchal or tribal “family,”—which was the basis and central principle of the Inca-Quichua social, economic, political, and religious organization, corresponded to the “joint family” of the Indo-Aryans. Like the “joint family” the Ayllu held the land of the community in common and worshipped the

¹⁶ Markham, *Incas*, etc., pp. 109-10.

¹⁷ Cieza de Leon, *La Crónica del Perú* (Madrid, 1922), pp. 214-17.

¹⁸ Montesinos, *Memorias*, etc., del Perú (Hak. Soc.), p. 65.

“Some older writers, like Betanzos, say that they interred with the kings of Peru a thousand children and when they received the fringe which was introduced afterwards, two hundred children brought from all over the kingdom were sacrificed. According to what I have been able to find out, this was not the custom though certain kings did it sometimes.” (Montesinos, *ibid.*)

¹⁹ Cieza de Leon, *supra*, pp. 214-15.

founder or principal ancestor of the Ayllu at a common *huaca* or shrine.²⁰

"The joint family is by far the most important institution of Hindu society, and it is only through the joint family that we can form a proper conception of the Hindu law. It is the form in which the patriarchal system has survived in India."²¹ As in Peru the property, especially the land, of the joint family was inalienable except by the family as a whole and was enjoyed in common by all the members of the "lineage." They had the same penchant for land and the same reluctance to dispose of it which has characterized all branches of the Aryan race, including our own, and which has had much to do with the migrations and wars of the race. The same disposition to retain the land in the family is reflected in many provisions of the English and American law. Like the Ayllu, the "joint family" "is said to be joint in food, worship, and estate" and has a common center "where the family gods remain" and "where the family worship is conducted."²²

²⁰ Markham, *Incas*, etc., pp. 104, 113, 159-61.

²¹ Sir William Markby, "Indian Law," *Encyc. Brit.*, 11th ed.

²² Markby, *supra*. The joint family in India and the Ayllu in Peru date back to archaic times. They were at least as old as the megalithic age. This fundamental social institution in Peru was by no means a product of Inca policy.

Whether brought in by the first Ayars, or even before that by kindred stock, the institution of the Ayllu was so deeply imbedded in the very fundamentals of the Peruvian social structure that it survived every change of dynasty, every military disaster, every social revolution. It endured and even imposed itself upon the otherwise almost unlimited despotism of the Inca dynasty. It was so intimately woven into the essential fabric of the community life that it was not entirely destroyed even by the holocaust of the Spanish conquest. After four centuries of Gothic rule the Peruvian Ayllu still exists. In the isolated valleys of the Andes the remnants of the Quichua race hold today in "joint family" or community ownership such of their ancient estates as have escaped the *repartimientos* of the Spaniards,

The effects of centuries of rigid and even cruel enforcement of caste law,—though even this was not, any more than it was in India, sufficient to preserve the integrity of the Ayar race,—were evident in the character and appearance of the people at the time of the arrival of the Spaniards. “The face of the individual, subjected to a routine and unchanging mode of life, showed no trace of the passions, the appetites, and the impulses characteristic of a distinct personality who struggles to gain a place on a stage of changing situations such as that on which modern society moves, and which imprints on the physiognomies of the people an appearance and expression which is distinct in the proletarian and the rich, the intellectual and the ignorant, the noble and the plebeian. In a society in which marriage, confined exclusively to the circle of the Ayllu, tended to give a uniform physiognomy and expression to the greater part of the natives, such as happens in the ranks of the smaller gregarious fauna, the deformation of the ear was required in the aristocratic classes, from which the monarch was selected, as a means of differentiating themselves from the common mass of natives.”²³

This passage is somewhat involved. Though it is undoubtedly true that rigidity of caste in fixing each man's status in life and regulating his occupation to the smallest detail in a socialistic state under aristocratic rule tended to a uniformity of type within each caste, it would seem, on the other hand, to create a divergence of type as between different castes established in widely varying modes and conditions of life—as, for instance, between the la-

²³ R. Cúneo-Vidal, *Bol. Soc. Geog. de Lima*, XXXIII (1917), 1st and 2nd quarter, 52.

borers, who constructed and cultivated the terraced farms or herded the llama on the snow-swept Andean pastures, and the idle lords or learned Amautas who ruled them. The probability is, however, that,—aside from a mere barbaric love of grotesque ornament,—the mixture of blood and consequent confusion of families between the upper and lower castes, notwithstanding the penalties and inhibitions of the law, in the course of many generations had so obscured the racial purity of the Ayar-Inca ruling race that a distinctive and striking badge of identity became an aid in maintaining its dignity and authority.²⁴

²⁴ The founders of the early Egyptian civilization were white. The decay of the civilizations founded by white races in Egypt, India, China, Mexico and ancient Peru was due to the amalgamation of the white founders with the indigenous darker peoples. E. S. Cox, *White America* (Richmond, 1923), pp. 80 *et seq*; 153 *et seq*. James Denison Sayers, *Can the White Race Survive?* (Washington, 1929), p. 34 *et seq*.

XXXIV

ARYAN BLOOD THE BASIS OF AYAR-INCA CASTE

IN the United States,—especially in the Southern States,—the imperious instinct of race preservation and of white Aryan racial superiority, the same instinct which made the caste system the basis of Aryan religion and government in India in the struggle of the superior Aryan conquerors to preserve their racial integrity, has formed the paramount domestic political issue of our national existence.

The same paramount issue,—the preservation of the white Aryan race,—characterized and explains largely the civil and religious culture of Incarial and pre-Incarial Peru. The various infusions of pure or mixed Aryan stock which arrived in America by way of the Pacific were overwhelmed in the greater mass of indigenous peoples of earlier Asiatic origin; just as the white Aryan immigrants, leaders and conquerors, notwithstanding all the rigidity of caste, government, and religion, have been merged in the darker indigenes of India, and to a less extent in those of Japan, and to a still smaller degree in China.¹ The Mexicans, Mayas, and Peruvians, like the English and nearly all other peoples, were mixed races; and in the mixture the white Aryan element has been still further obscured

¹ Marco Polo describes Kublai Khan as having a "white and red complexion."—*Book of Marco Polo*, edited by Sir Henry Yule, p. 356.

since the destruction by the Spanish conquest of the social castes, the royal and aristocratic privileged classes, by which in a measure and for a time it was preserved.

The color line has not been strictly drawn in Latin-America. The caste system of the Aryan Inca was as rigid as and very similar to that of the Aryan-Brahmins; and in the beginning it was probably instituted for the same purpose,—namely, in a desperate effort to preserve the purity of the white race. No one of the lower orders could marry a woman of Inca blood on pain of death. But in Peru, as in India and Mexico, the all-powerful and dominant impulse of sexual attraction evaded or defied the restrictions of caste even though law and religion sanctioned and sought to enforce them.

Even before the Spanish conquest the tide of darker blood had overflowed the artificial barriers and discolored the smaller Aryan stream. In the debacle of the Conquest, the downfall of Inca and Montezuma, all barriers were swept away and all castes merged in the indiscriminate chaos. The royal Ayar blood was lost in the general flood, and while traces of it may even yet be seen, at times, in the Indians of today, it is as but the remnants of their architecture,—their abandoned terraces and jungle-grown temples.

The royal and aristocratic caste was merged with the peon and the coolie, and the noble race was submerged in the downfall of the great structure it had built. In Cuzco the descendant of the Inca,—ragged and barefooted but still with a tawdry effort at distinctive dress,—cried as he related to me the woes of his people and accepted petty alms like any beggar.



IAHUAR HUACCAC

From "Monarquía Peruana," by Dr. Justo Sahuaraura, Inca.

Ninety-seventh Ayar king in the Blas Valera list as cribbed by Montesinos.

Note the sacred lotus of the Indo-Aryans crowning the Inca's scepter,—and the same sacred fleur-de-lis upon his cassock.

Though much degraded, the masses of the Quichuas, like the Mayas and Mexicans, are of the same general type today as when the Spaniards arrived in America. As in India, they were the slaves of the state and the state was the Ayar aristocracy. The masses of the people were of a different stock from that of the ruling Ayar caste,—though, as in India, the mixture of castes was constantly in progress. The mass of the Quichuas perhaps, as a race, had some traces of distant kinship to that of the Ayars. By war and politics they had been subjected to the rule of the Ayars, who had maintained themselves as a superior caste. The masses, as always, survived the cataclysm; the less numerous, the cultured and aristocratic orders,—descendants of the earlier white Aryan conquerors, priests, and teachers,—have disappeared, not only as individuals and as a caste but as a type.

And as has so often happened in somewhat similar circumstances in India, in China, in Egypt, in parts of Italy and Greece, the new conquerors have in their turn suffered the same fate. The Spanish invaders,—a new Aryan immigration,—in their turn are losing their identity in the mixture of bloods. Unprotected by rigid and despotic rules of caste, their amalgamation is more rapid than that of their predecessors. But in this case continuous immigration from Europe, bringing recruits for the white immigrants in America, coupled with the declining numbers of the indigenous people, creates a different situation from that of the Aryan tribes in the dense masses of the darker races of India, the Ayars in Peru, and the Chinese along the great river valleys of southern and southeastern Asia. The more ready communication with the home-

land, the greater reservoir of white, largely Aryan, population in Europe, from which to draw, may yet turn the tide of blood in favor of the white Aryans.

The primitive Asiatic tribes of mixed Aryan race who reached America by the northern route with blood already diluted by generations of contact with the "darker peoples" in Asia—to be still further fused with the primitive American races, dating back even to Pleistocene times,—had reenforcements from Asia, no doubt,—but not so frequently. Communication with Asia undoubtedly existed,² but it was not continuous; and the recurring migrations were lost,—much more completely than has been the case with the great migrations from Europe to America and our great western trek across the continent, in our time,—to their parent stock and parent land.

To an even greater extent was this true of the great megalithic race of white, primitive, Aryan stock, and later Aryan migrations which reached America in successive stages,—possibly with many generations intervening,—by the archipelagoes of the South Seas.³ They were lost to the lands and the people whence they came; though there is

² As to the long voyages of the Hawaiians, see Dr. P. A. Lesson, *Les Polynésien*, II, 151. As to the communication of the Polynesians with the American continent, *id.*, IV, 170. Communications between Polynesia and India and southeast Asia, *id.*, IV, 181. Origin of the Polynesians in Cambodia, *id.*, IV, 187.

Lesson mentions the appearance of the place-name *Savaii* (traditional ancestral home of the New Zealanders) in Cambodia. The author, however, expresses the view (with which few, if any, agree) that the Maori were autochthonous in the southern island of New Zealand. Edward Tregear, former President of the Polynesian Society, is cited by William Churchill, "Polynesian Wanderings" (Carnegie Institution, 1911), p. 20, as stating the generally accepted view of Polynesian scholars to be that the Polynesians came from India, or from central Asia through India.

³ The Spaniards, French, and English later sailed to nearly all of these same archipelagoes in ships that were scarcely larger than those of the great Polynesian navigators. Cook reported that some of the boats of the Polynesians, consisting of several canoes lashed together in a solid framework

evidence that word of the new land to which they had come got back to Asia and was known in China and Japan at least as early as the fifth century of our era.⁴

"The cardinal principle which underlies the system of caste is the preservation of purity of descent, and purity of religious belief and ceremonial usage."⁵ The significance of the Aryan race itself as the basis of caste among the Indo-Aryans is evident in the fact that the *vaisyas*, composed of agriculturists and business men, one of the three higher castes and the most numerous, was originally called *Ârya*, which means noble.⁶

Adherence to caste rules and ceremonial as laid down in the elaborate and intricate ritual of the Vedas,—especially as to marriage,—was the one absolute essential of Brahmanism. In India "the idea of caste is expressed by the Sanskrit term *varna*, originally denoting color, thereby implying differences of complexion between the several classes."⁷

In the central region of northern India, where the caste system was earliest and most rigidly developed, the great numbers of the indigenous dark-skinned, short, broad-nosed Dravidian people⁸ threatened to absorb the small numbers of "tall, fair-colored, fine-nosed" Aryan invaders

so as to form really one boat, with decks, cabins, outriggers and sails, were as large as his own. Cook's ship on his first voyage in 1768,—the *Endeavour*,—was 97 feet long, a third as wide, and her burden was 368 tons. She carried eighty-five men. (*Nat. Geog. Mag.*, Jan., 1927, pp. 101-24.) This publication also contains a reproduction of a drawing, made by an artist accompanying Cook, of the remarkable Polynesian boats.

⁴ José Kimmich, *Bol. Soc. Geog. de Lima*, XXXIII (1917), 4th quarter, 461.

⁵ H. J. Eggeling, "Hinduism," *Encyc. Brit.*, 11th ed.

⁶ "Caste," *Encyc. Brit.*, 11th ed.

⁷ Eggeling, *supra*.

⁸ *Bharata*,—the dark indigenous people of India. (Cf. Spanish *barata*, cheap.) The oldest name of India was *Bharata-Vasha*.—S. Percy Smith, *Polyn. Soc. Jour.*, XXVIII, 21, n. This was the name given to its

and conquerors. "The problem that now lay before the successful invaders was how to deal with the indigenous people, probably vastly outnumbering them, without losing their own racial identity. They dealt with them in the way the white race usually deals with the coloured race—they kept them socially apart. The land being appropriated by the conquerors, husbandry, as the most respectable industrial occupation, became the legitimate calling of the Aryan settler."⁹

The last-mentioned feature describes exactly the action of the Spanish conquerors of Peru. They appropriated the land and the people with the land,—divided the natives among themselves, as serfs attached to the soil, exactly as they did the soil itself. But,—probably because of the earlier blood-mixture of many of their people with Moors, when the process had been reversed and the darker people were the conquerors of Spain,—the Spaniards in America did not draw the color line so strictly, and such caste as they established came to be based rather on the ownership of land than on white skin.

The earlier Aryans who reached Peru had no doubt undergone a mixture of blood with darker races in their long migration; but nevertheless an aristocracy based on blood was established. Even the high chief Ollantay, who was not of the blood royal, was proscribed and outlawed because he dared to love the royal and fair-skinned Princess *Cusi Coyllur*, the "joyful star,"—contrary to the laws made by her father, Pachacuti, the greatest of the Incas.

indigenous people by the proud Aryans as an expression of their own sense of superiority.

As a distant example of exactly the same racial reaction, the Norsemen called the aborigines of Vinland "skraelings,"—inferior people.

⁹ H. J. Eggeling, *Hinduism*, *supra*.

XXXV

THE ARYAN NAME BORNE BY THE FOUNDERS OF THE INCA LINE

THE founders of the dynasty of the Incas and their predecessors, the Amautas, called themselves *Ayars*,—so written by Pedro de Sarmiento on the oral traditions of their descendants. This was the title retained and insisted upon by the four “August Personages,” who, according to the myth of Paccari-Tampu, came out of the central one of the windows of the hill of that name,¹ secured the leadership of a number of clans, or *ayllus*, by promises of booty, and began the migration and conquest which led to the establishment of their line at Cuzco and eventually to the building of the Inca empire.

They were an agricultural people. The chief object of their migration was the acquirement of more fertile land, and it is said that the site of Cuzco was selected because of the richness of the soil at the head of the valley, where the alluvium had been accumulated from the surrounding hills at the junction of the rivulets Huatanay and Tulumayu. Here, when the Ayar Manco Ccapac, the elder brother, cast his golden staff, it “sank its whole length in the rich mold.” It was a typical Aryan migration. “They not only took with them their arms, but also their movable property, wives, and children.” They took

¹ “Ayar,—a name applied to the four brothers in the Paccari-Tampu myth.” Sir Clements Markham, Introduction to *Memorias Antiguas* of Montesinos (Hak. Soc.), p. 11.

with them, no doubt, as their remote ancestors had done in Asia before the days of Abraham, their flocks which constituted their wealth and livelihood. "Their movements were slow and deliberate, even stopping to sow and reap"; which reminds one of Daniel Boone planting his corn crop in Kentucky.

Markham says: "While the Titicaca myth was obviously invented to account for the ancient ruins and statues, and has no historical value, the Paccari-tampu myth is as certainly the outcome of a real tradition, and is the fabulous version of a distant historical event. . . . It records the march of those descendants of the ancient civilizers who took refuge at Tampu-tocco. They were empire builders marching to Cuzco, with their religious beliefs and ceremonies, their insignia of royalty, their traditions of laws and customs, and their household gods."²

The great triple line of megalithic fortifications about the base of the hill of Sacsahuaman, was the work of "ancient civilizers" whose identity was unknown to the Incas of the time of the Spanish conquest but who were undoubtedly earlier leaders of the same Ayar race, who lived many ages before the rise of the dynasty of the Incas from the descendants of the same early line. The first of the early "civilizers" whose name appears in the traditions, which have been carefully preserved, was Pirua *Paccari* Manco. This mythical founder is said to have been followed by a dynasty of eighteen of his successors to which his name, Pirua, was given.³

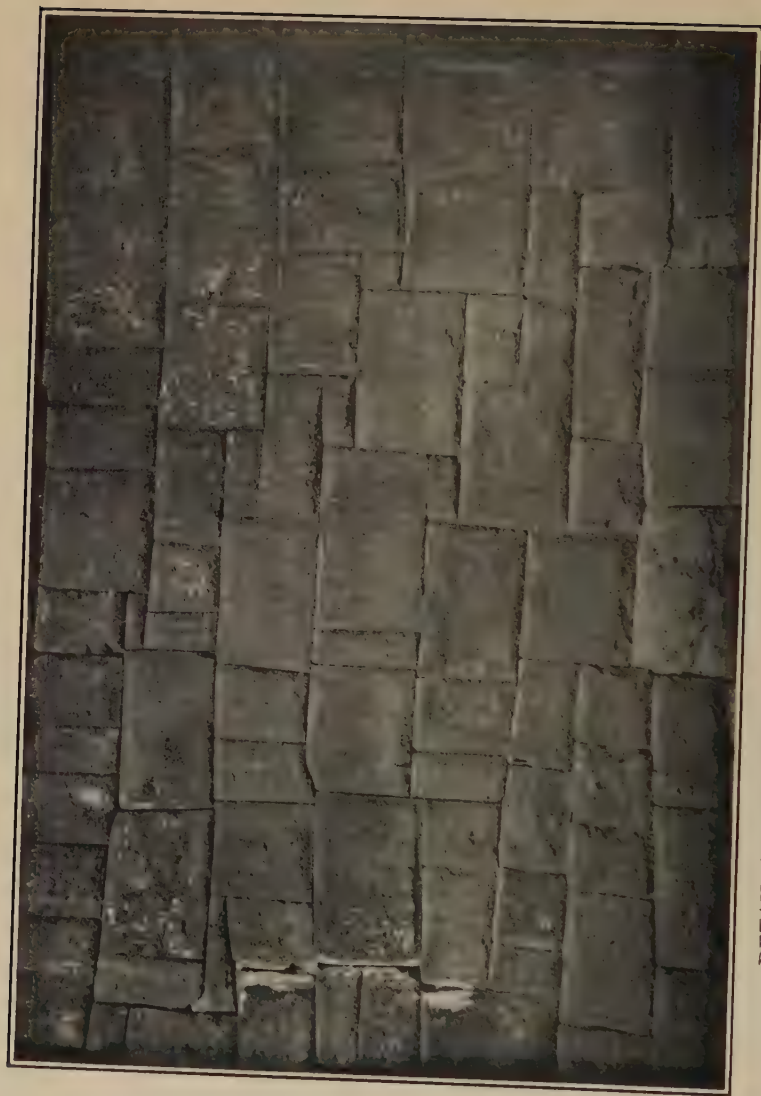
After this there was a line of forty-six monarchs,—

² Markham, *The Incas of Peru*, pp. 48, 54.

³ Markham, *supra*, p. 42.



Huaco niches (recesses for idols) and doorway in the approach to the temple of Ollantaytambo.
Compare the details of the masonry with the different type shown in the illustration facing the next page.



DETAIL OF ONE TYPE OF FINE AYAR-QUICHUA MASONRY IN CUZCO
On the left can be seen the marks of a vandal's chisel, an unsuccessful effort to extract a stone.

thirteen of whom bore the title Amauta,—called the Amauta dynasty,⁴ who were undoubtedly from the same ruling race as the previous Pirua monarchs. The Amautas were “learned men, keepers of the records and revisers of the calendar.” Many of them, no doubt, belonged to the priesthood, and the epoch of their rule corresponds (in its political character) to that of the priest kings of Egypt, the prophets of Israel, and the Brahmins of India.

There was a period of apostasy from the old, purer religion of Viracocha, and of general demoralization of the character and discipline of the people, which led to the overthrow of their government and culture, and almost to the extermination of the royal line. There was an invasion from the south. A great battle was fought in the pass of the Vilcanota, about the wall and fortresses between the great pampa of Titicaca and the valley of the Vilcanota. The Amauta king was defeated and killed. “The whole country broke up into a number of petty tribes, and barbarism returned, with a vicious state of society and intestine feuds.” A remnant of the old ruling race took refuge in the mythical land of Tampu-tocco,—probably the wild mountain district lying between the Vilcanota and the Apurimac,—and preserved here the traditions of their culture and religion.

In the course of time they built on one slope and the summit—the other side being perpendicular—of an almost inaccessible granite ridge, enveloped in the serpentine gorge of the Urubamba, the white stone city of Machu Picchu,—with its terraced and pyramided mountain, its watch-platforms on the jutting salients of the mighty

⁴ Markham, *supra*, p. 44.

precipices, its sacrificial stone and intihuatana on the very sky line of the sierra where the sacred dial caught the first and last rays of *inti*, the sun-god, reflected from the snow peaks in the distance over the majestic panorama of the central Andes. From the extent and beauty of the masonry of this Ayar city,—its palaces and royal tombs, its granite stairways surmounting the mountain-side, its temples, terraced farms, carved fountains, its walls and bolted gates,—it is evident that here, at least, the industry and discipline of the people were restored. Here is a house with three windows of beautiful masonry which are identified by some writers⁵ with the fabled “caves” or “windows” out of which the ancestors of the Inca kings came when they began their migration to Cuzco.⁶

After the lapse of many generations when the rule of the conquerors from the south had become weak and the

⁵ Hiram Bingham, *Inca Land*.

⁶ The tradition (Markham, p. 49), speaks of three windows. It is a curious fact that, while there were originally five windows of symmetrical design and alignment in the wall of the white granite palace at Machu Picchu, two of these have been closed up by masonry so closely fitted and harmonizing so perfectly with the wall that it requires close observation to detect them. (Photographs, *Nat. Geog. Mag.*, April, 1913, pp. 418, 431.)

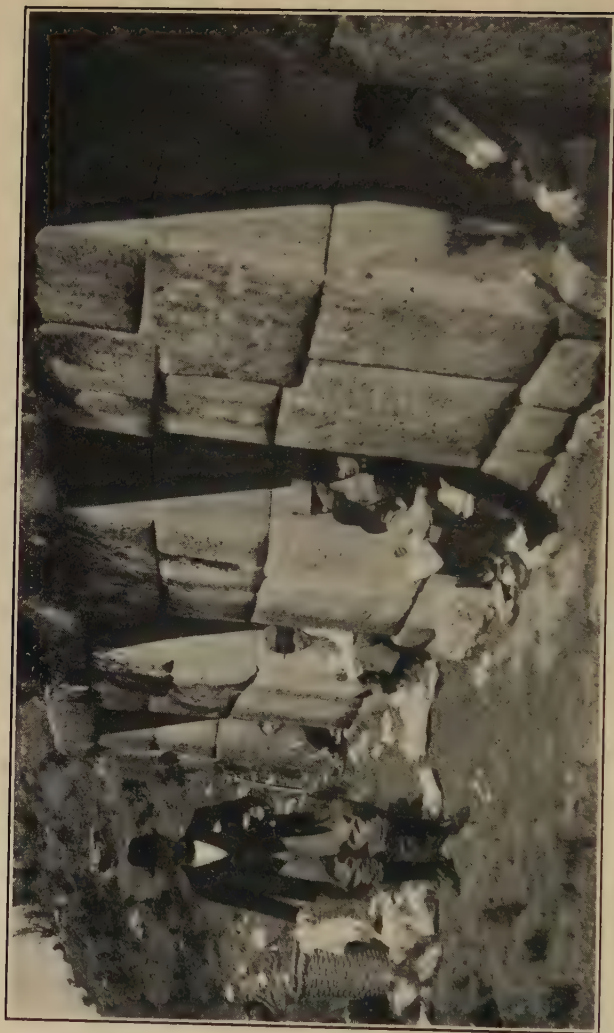
The tradition, on the other hand, relates that Ayar Manco, *after he had established his rule at Cuzco*, caused a stone house with three windows to be erected at “Paccari Tampu” as a memorial of the origin of his family. *Inca Land*, Hiram Bingham, p. 327, citing Markham’s translation of Sallcamayhua. The Paccari Tampu myth of the origin of the Ayars undoubtedly relates to an archaic time far older than Machu Picchu. As related above (Vol. I, p. 168 *et seq.*), practically the same myth existed in Mexico, and similar legends accompanied the migrations of Proto-Aryan tribes in Asia.

The first king in the list of Blas Valera (purloined by Montesinos) is Pirua Paccari Manco; the second, Manco Capac. (Markham, *Incas*, etc., p. 306.) It is to these legendary archaic Ayar leaders that the myth of Paccari Tampu and the founding of Cuzco refers, and not to the Ayar Manco, who eighty-six reigns later reestablished the Ayar rule in Cuzco after the long period of exile and slow recovery in Tampu-tocco following the defeat and death of Pachacuti VI in the Battle Gap of Vilcanota.



WALL OF THE FAMOUS "HOUSE OF THREE WINDOWS,"
MACHU PICCHU

Photograph by the author.



UPPER TERRACE AND HUACO (IDOL) OR MUMMY NICHES AT TAMPU-MACHAY

On the left, Prefect of Cuzco ; Señor Vasquez y Valesco.

country had fallen again into chaos and disorder, the Ayar leaders left Tampu-tocco and began their migration to Cuzco. Ayar Manco is listed in the traditions as the twenty-second king who had ruled in Tampu-tocco. By strategy, diplomacy, and conquest, he gained the obedience of many Ayllus and finally extended his rule to Cuzco and founded a new Ayar régime in the ancient capital of the Ayars which lasted through the reigns of seventeen kings of whom Ayar Manco was the first of the new line and his descendant, Rocca, the first to assume the title of Inca.⁷ The first seven of these are listed

⁷ While the *Memorias* of Montesinos have been discredited by many critics, Markham points out that Montesinos' list of kings was taken from a much more reliable author,—the "anonymous Jesuit," who was none other than Blas Valera, and that Blas Valera "obtained the list of kings from the Amautas of an early generation." Valera's work was compiled in 1591. Markham, who studied the Inca language and traditions for the greater part of his life, attached great faith to the traditions as preserved by the Amautas with the aid of the quipus in charge of trained officials called Quipucamayoc. "Blas Valera refers, as his authors for various statements respecting rites and ceremonies, to the *quipus* preserved in different provinces, and even by private persons." The Paccari Tampu myth was obtained independently from the native chroniclers by Garcilasso de la Vega, Cieza de Leon, Betanzos, Balboa, Morua, Montesinos, Salcamayhua, and Sarmiento; and is reported substantially the same by them all.

As to the care with which some of the ancient oral traditions were collected and verified, "Sarmiento tells us how this was done on the highest authority. He examined thirty-two witnesses of the Inca family in 1571, and his first inquiry was respecting the way in which the memory of historical events was preserved. He was informed that the descendants of each sovereign formed an *ayllu* or family, whose duty it was to keep the records of the events of his reign. This was done by handing down the histories in the form of narratives and songs which the *Amautas* of each *ayllu*, specially trained for the duty, learnt by heart from generation to generation. They had help by means of the *quipus*, and also by the use of *pictures painted on boards*. [*Italics mine.* M. P.] These pictures, it was stated, were preserved with great care." (Markham, *supra*, pp. 140, 141.) Tradition relates how, upon the advice of a priest, one of the Incas ordered the pictures to be destroyed, and none of them have come down to us. With the exception of the picture writings, the manner of preserving the traditions of the Ayar-Incas by trained historians was identical with that of

(Markham, p. 309) as belonging to the Tampu-tocco line, and the last ten as the Inca dynasty ending with Huascar.

The word *Ayar* was used by Manco Ccapac in the same sense as the Sanskrit *Ārya* or *Āria*. The latter "represents a name which the Aryan people of Asia applied to itself in distinction to the darker-skinned peoples about it."⁸ The Zend form of the word, as used by the Iranian branch of the race in Iran, or Persia, was *Airya*,⁹—identical in sound with the title of the Paccari Tampu leaders. In the *Rig-Veda* the related Aryaman is an epithet of the deity.¹⁰

The Inca kings and their Ayllus claimed to be the sons of the sun, and the title of Ayar, or, as it might be written, *Arya*, was claimed by them as the epithet of caste and relationship to the god. There is something akin to this in the appellation Viracocha, given by the Quichua and Aymará Indians to all members of the white race of the Spanish conquerors. It seemed to reflect the ancient tradition that Viracocha had appeared as a white man and given them their arts, industries, and laws. No doubt this pre-Spanish tradition in turn reflected the actual appearance among the darker peoples of the first white Aryan leaders who brought them a new culture, acquired dominion, and began the construction of the great works. As customary among the Aryan kings, this ancient chief in Peru undoubtedly claimed to be a god and descended from the gods.

The four "August Personages" who came from Pacific the Polynesians. Pictures and writings on boards were also in use in Easter Island, Mongolia, and in some parts of Polynesia.

⁸ Benjamin Ide Wheeler, "Aryan," *Johnson's Universal Cyclopædia*, New York, 1896.

⁹ Eduard Meyer, "Persia, Ancient History," *Encyc. Brit.*, 11th ed.

¹⁰ Peter Giles, "Aryan," *Encyc. Brit.*, 11th ed.

cari Tampu, taught the religion of Viracocha in Cuzco and established the line of kings from which sprang the Pirua, the Amauta, the Tampu-tocco, and the Inca dynasties, all bore "the title of *Ayar*." In this movement "eight other *ayllus* or lineages were mustered under the banner of the Ayars."¹¹ "In both India and Persia, a word is found (Sanskrit *aryaman*-; Zend *airyaman*-) which is apparently of the same origin [as *Airya* in the Avesta] . . . employed [in the Rig-Veda] as the name of a divine being."¹²

Persia (Iran) was called Ariana (Zend *Airyaana*). "Towards the middle of the second millennium before Christ, the Iranians made a great forward movement to the west," —Mesopotamia, Syria, Palestine, Egypt. Their princes, "at first probably in the rôle of mercenary leaders . . . founded principalities of their own," and introduced the horse in Babylonia, Greece, and Egypt about 1700 B.C.¹³

Before this, no doubt, perhaps before their settlement in Iran, their ancestral stock had also sent branches to the east.

It may be significant that the Inca title was the *Iranian* as distinguished from the Hindu form of the ancestral word.

In Peru this title of the ruling race was probably derived from a megalithic people who had assumed it as a distinc-

¹¹ Markham, *supra*, p. 49. Sarmiento, *History of the Incas* (Hak. Soc.), p. 45. Montesinos, *Memorias Antiguas Historiales del Perú* (Hak. Soc.), p. 4. Cieza de Leon, *Chronicle of Peru* (Second Part, Hak. Soc.), p. 12.

¹² Peter Giles, "Aryan," *supra*. This author also states; "In the *Avesta*, *airya*- is found both as adjective and substantive in the sense of Aryan." This family designation among the ancestors of the Incas also no doubt included, as in Asia [B. I. Wheeler, *supra*], suggestions of the band or clan of the faithful, the loyal.

¹³ Eduard Meyer, *supra*.

tive name of superiority and rank in relations with darker races, similar to the position occupied by the Indo-Aryans. It "may be," says Markham,¹⁴ "archaic, possibly a megalithic word." It was the title given to himself in his inscriptions by Darius the Great, of Persia, descendant of an Aryan line;¹⁵ and it was claimed with the same insistence and pride by the white conquerors of India.

It is interesting to note that this same pride of race, characteristic of the Aryan people, expressed in the Aryan name, has been inherited by our branch of the Teutonic-Celtic stock. Almost as by an unconscious mental reaction, we called ourselves Aryans, with the same instinctive sense of pride of ancestry with which Darius, the Brahmins, and the Incas called themselves by the racial name.

¹⁴ *Incas*, etc., p. 43.

¹⁵ "A Persian, the son of a Persian; an Aryan, and of Aryan stock." (A. V. Williams Jackson, "Iranians," *Johnson's Universal Cyclopædia*, New York, 1896.) His name in Zend was *Darayavaush*.

"Arya, Sanskrit meaning 'noble,' and this probably from *Ar*, 'to plow,' indicating the superiority of the agricultural to the nomadic life." J. Thomas, "Arya or Aryan," *Johnson's Universal Cyclopædia*, New York, 1886, Vol. I, p. 270.

XXXVI

THE KINSHIP OF THE AYAR-INCA RELIGION WITH OUR OWN

MANY of the Inca hymns and prayers were similar to our own. The traces of the common origin of both can be found in the Rig-Veda and the Zend-Avesta. They had been preserved by oral traditions from still older sources before the invention of writing,—as the Iliad was formed and preserved in Greece by the recitals of the legendary Homer. No doubt they had taken form in the religious rituals of the great parent race before the development of the separate cultures of the Iranians and the Indo-Aryans. These superb appeals to divinity voiced the conceptions of the great race which first saw God as a spirit manifesting his power and glory in the elements. The early Paleo-Aryans studied nature and saw the handiwork of God in the heavens and upon the earth. They sought to reconcile themselves to the omnipotent Power in whose very presence they seemed to live and upon whose favor they depended as farmers and herdsmen.¹

¹ "The people of Puloaniue, an island off the southwestern coast of Sumatra, like the Battas and Dyaks, a pre-Malay remnant of the Polynesian race, called the sky, or heaven, by the name of *Holiyawa*."—Editor's note, *Polyn. Soc. Jour.*, XVII, 42, citing Judge Fornander (*Polyn. Race*, I, 57). This is an exceedingly interesting and potentially instructive reference. *Yaweh*, *Jehovah*, *Jove*, are various forms of the name of a primitive Asiatic sky-god. From this reference the name seems to have been carried from its central Asiatic home, along with the Proto-Polynesian pioneers, to the southeastern Asiatic archipelago.

Hawaiki, the sacred cradle-land of the Polynesian race, is identified by the great New Zealand scholars and students of Polynesian origins (see their various learned discussions in the *Polynesian Society Journal*) with

The magnificence of their conceptions and the beauty of their religious expression reached their highest form of eloquence and poetry in our Scriptures,—the grandeur of Job, the powerful imagery of the Prophets, the passionate desire of the Psalms of David the “Shepherd King.” But these hymns and prayers and these visionings of the unseen God are of the same texture and some of them almost of the same form as portions of the Zend-Avesta, the Rig-Veda, and the fragments of religious literature which have been preserved from the colossal wreck of the Peruvian-Inca culture.²

the island of Java. *Hawa, saba, sava*, are all various Polynesian forms of Java (or Yaweh). It is also sometimes written *Awa*. Hawaiki, Hawaii, Savaii, were forms of the same word with the diminutive suffix.

It is interesting to note the apparent identity of the Polynesian *iki, iti*, with the Spanish *ita, ito*. The Spanish, from its Gothic elements, has apparently preserved more of the archaic Proto-Aryan forms than any other western language. The newspapers have recently noted the surprised comments of exploring archaeologists in Tibet upon the similarity of customs indicated by the Tibetan sepulchral remains, which they have examined, to those of the Goths.

This ancestral name *Hawa, Jawa*, in its various forms, fixed by the ancient voyagers on their various stopping places and colonies along the route of their racial migration, serves as a sign and marker of the road by which they came. By it their journeys can be traced back with a fair degree of clearness.

² In a review (London *Morning Post*, Dec. 11, 1913) by A. C. Haddon (“one of the leading ethnologists of the Old Country, well-known as the leader of the Cambridge Ethnology Expedition to New Guinea”) of “The Lore of the Whare-Whananga,” by S. Percy Smith (*Memoirs, Polyn. Soc.*, III), the reviewer says: “It is of interest to note that ‘many of the Polynesian myths and traditions’ find their counterpart in those of the Scandinavian, Celtic, Indian, and other branches of the Aryan race; indeed, as in the case of the Icelandic versions, they seem specially well preserved because of the early isolation of the people in their island homes. The author believes that the Polynesians can be traced back to India; he even suggests tentatively that ‘these Caucasian-Polynesians are an early branch of the Proto-Aryan migration into India.’” Reprinted in *Polyn. Soc. Jour.*, XIII, 56.

“The center and core of the whole religious teaching [of the Polynesians] is the doctrine of Io, ‘the Supreme God, Creator of all things, dwell-

As among the Aryans of India, the worship by the Incas of the omnipotent and invisible spirit, Viracocha, creator

ing in the twelfth or uppermost heaven where no minor god might enter except by command." (It is interesting to note here the possible common origin not only of the name of the god *Io*, pronounced *Yo*, but of his characteristics, with those of the Asiatic *Yah*, and the possible relationship of *Io* to *Ya*, *Ja*, *Ha*, *Sa*, *Jo*, in *Yaweh*, *Java*, *Hawa*, *Sava*, *Jove*, etc.) "A certain resemblance to Moses may be traced in the god Tane, who was summoned by *Io* to receive from him the 'three branches of knowledge on the two sacred stones.'" (*Ibid.*, p. 56.) Note illustration *ante*, opp. p. 111.

"*Io* herself [in Greek myth] is variously interpreted. She is usually understood to be the moon in the midst of the mighty heaven."—"Io," *Encyc. Brit.*, 11th ed.

"On entering Hawaiki-rangi [the House of Rites in the ancestral cradleland of the Polynesians to which the spirits of the dead returned] the spirits of those who sympathized with their father [the sky] separated and ascended by the whirlwind path to the bespaced heavens, to *Io* of the Hidden Face and the companies of beings of the bespaced heavens."—Maori myth, "Irihia," *Polyn. Soc. Jour.*, 1927, pp. 339-40. Cf. H. G. Wells' "Veiled Being," and Immanuel Kant's "Starry Vault."

Mr. Haddon's review, as reprinted in the *Journal*, continues: "But the author disclaims all leanings to the Lost-ten-tribe theory." Naturally so, since both the name and the concept of *Io*, as well as of *Yaweh* (Jehovah) antedate by far the "Ten Lost Tribes." If there is a relationship, as seems probable, between the name and the conception of the Polynesian and the Hebrew gods, it is because both came from a much older archaic common origin.

However, there was a wide-open road by which contact of the Ten Lost Tribes may have been established with the central Asian Aryans. By this same road portions of the language, the culture, and even the blood of the so-called Ten Lost Tribes may have reached the Indo-Aryans, and by them have been passed on to Polynesia, and thence to America. This might well account for the traces of the Semitic tongue and Semitic religion which appear in the Pacific islands and in South America, among peoples who, in the main, were of an entirely different stock.

"The author [H. K. Trevaskis, author of *The Land of the Five Rivers: an Economic History of the Punjab*] accepts the old theory which has always been held by the Afghans themselves, and which holds the field, that the Afghans who conquered the Aryan Pathans in Afghanistan before 1000 A.D., and subsequently overran the Trans-Indus and Western Punjab, were descendants of the ten lost tribes of Israel, whom Sargon of Nineveh settled in the mountains of the Medes. For long our linguists said that this was impossible, as their language had an Aryan basis, but science also is still not certain and theories change and the language test of origin is one of the discredited theories. It is not impossible that the Baluchis, who conquered the country south of Afghanistan, were of similar origin."—Louis Dane, "The Panjab: a Review," *Geog. Jour.*, LXXII, 464.

and preserver of the world, was confined to the higher castes. The intimate family religion of the common people, as in China and India, was the worship of the ancestors of the family, or *ayllu*, and,—as in some groups among ourselves,—of various religious emblems, talismans, pictures and images of the saints, coupled with a belief in ghosts and spirits of all kinds, and in forms of good or bad luck, magic, etc.³

The Psalms of the high-caste Incas “are the expression of a longing to know the invisible god, to walk in his ways, to have the prayers heard which entreat the Deity to reveal himself. They show a strong sense of his guiding power in regulating the seasons and the courses of the heavenly bodies, and in making provision for reproduction in nature. . . . There is, indeed, a plaintive note in these cries to the Deity for a knowledge of the unknowable, which is touching in its simplicity.”⁴

There was a recognition of the presence of the divinity in all the forms of nature as in the question and answer of the Shorter Catechism of the Presbyterian church, “Where is God?” (Answer) “God is everywhere.” There is the same conception of the immanence and the intimacy of the Deity as in the “Logoi” or “Sayings of Jesus” discovered some years ago upon the fragment of an ancient papyrus in a purlieu of the city of Alexandria,—as though seeking to express the idea of the presence of God in hid-

³ The Polynesians worshipped the gods represented by the idols rather than the idols themselves. Note, *Polyn. Soc. Jour.*, V (1896), 33. The same was true of the Peruvians as it is to a large extent of certain divisions of the modern Christian church.

The Maoris had attained to the conception of God as an invisible spirit. —Joshua Rutland, *Polyn. Soc. Jour.*, XII, 181.

⁴ Markham, *Incas*, etc., p. 99.

den and secret places: "Lift the rock and there I am; cleave the wood and there ye find me."

The appeal of the Inca penitent upon going to confession before the priest, "Hear me, highlands, plains, condors which fly, owls, grubs, and all animals and herbs, know that I wish to confess my sins,"⁵ is but a fleeting fragment that is left to us of the elaborate ritual of the Aryan-Incas, but even so its identity in tone and conception with the canticle of our own Protestant Episcopal church, based upon the 148th Psalm, is evident:

"O ye Mountains and Hills, bless ye the Lord: praise him, and magnify him for ever.

"O all ye Green Things upon the Earth, bless ye the Lord: praise him, and magnify him for ever.

"O let the Earth bless the Lord: yea, let it praise him and magnify him for ever.

.

"O all ye Fowls of the Air, bless ye the Lord: praise him, and magnify him for ever.

"O all ye Beasts, and Cattle, bless ye the Lord: praise him. and magnify him for ever."

In the Psalms of the Incas there is the same passionate appeal to the unseen but omnipotent spirit to make himself known, to reveal himself to his penitent worshippers,⁶

⁵ Rivero and Tschudi, *Peruvian Antiquities* (Hawks), p. 182.

⁶ Some of the responsive readings of the priests and people of Rarotonga were much like our own.

Priest: Speak, thou ancient Tangaroa,
To thy worshippers!
Praise Tangaroa, praise him!

Continued on page 276.

as burns through the pæans of King David. "Might I behold thee, might I understand thee," prays the Inca; "Oh, let thy face shine upon me, make thyself known unto me," pleads the penitent King in our own version of this Aryan hymn to the Maker of the world.

The following examples of the Inca hymns and prayers naturally suffer greatly in their translation by Europeans from the beautiful and eloquent Quichua language in which they had been carried down the generations in the traditions of the Incas. Even at the best, and giving all due credit to the translator, it is a severe test to place this English version by the side of the unsurpassed classic beauty of the King James version of the Bible. Certain passages in the Inca hymns, which in the translations given have the same meaning as our own Scripture ritual, might be translated in the identical language of the latter, but I have left them as given in the exact and clear translations, in his own form of words, of Sir Clements Markham, who had no thought of the comparison here referred to.

INCA HYMN TO UIRA-COCHA

PSALMS OF DAVID

O Uira-cocha! Lord of the
universe,

Whether thou art male,

Whether thou art female,

Lord of reproduction,

Whatsoever thou mayest be,

Hear my cry, O God; at-
tend unto my prayer.

.
The heavens are thine, the
earth also is thine: as for the
world and the fulness thereof,

People: Praise him, praise him!

Let the gods speak!

Let the chiefs rule!

We offer thee worship, O my God!

"Whence of the Maori," Smith, *Polyn. Soc. Jour.*, VII, 219.

INCA HYMN TO UIRA-
COCHA

O Lord of divination,
Where art thou?
Thou mayest be above,
Thou mayest be below,
Or perhaps around
Thy splendid throne and
sceptre.
Oh hear me!
From the sky above,
In which thou mayest be,
From the sea beneath,
In which thou mayest be,
Creator of the world,
Maker of all men;
Lord of all Lords,
My eyes fail me
For longing to see thee;
For the sole desire to know
thee.
Might I behold thee,
Might I know thee,
Might I consider thee,
Might I understand thee.
Oh look down upon me,
For thou knowest me.
The sun—the moon—
The day—the night—
Spring—winter,
Are not ordained in vain
By thee, O Uira-cocha!
They all travel
To the assigned place;
They all arrive
At their destined ends,

PSALMS OF DAVID

thou hast founded them. (Ps.
lxxxix, 11.)

Bow down thine ear, O
Lord, hear me; for I am poor
and needy. . . .

Give ear, O Lord, unto my
prayer; and attend to the voice
of my supplications. (Ps.
lxxxvi, 1, 6.)

For the Lord is a great God,
and a great King above all
gods. (Ps. xcv, 3.)

Cause me to hear thy loving-
kindness in the morning; for
in thee do I trust: cause me to
know the way wherein I should
walk; for I lift up my soul
unto thee. (Ps. cxliii, 8.)

Open thou mine eyes, that
I may behold wondrous things
out of thy law. (Ps. cxix, 18.)

When I consider thy heav-
ens, the work of thy fingers, the
moon and the stars, which thou
hast ordained . . . (Ps. viii,
3.)

He causeth the vapours to
ascend from the ends of the
earth; he maketh lightnings for
the rain; he bringeth the wind
out of his treasures. (Ps.
cxxxv, 7.)

Thou rulest the raging of
the sea: when the waves thereof

INCA HYMN TO UIRA-COCHA

Withersoever thou pleasest.⁷
 Thy royal sceptre
 Thou holdest.
 Oh hear me!
 Oh choose me!
 Let it not be
 That I should tire,
 That I should die.

PRAYER OF AN AGED INCA

O creator of men,
 Thy servant speaks,
 Then look upon him,
 Oh, have remembrance of him,
 The King of Cuzco.
 I revere you, too, Tarapacá.
 O Tonapá, look down,
 Do not forget me.
 O thou noble Creator,
 O thou of my dreams,
 Dost thou already forget,
 And I on the point of death?
 Wilt thou ignore my prayer,
 Or wilt thou make known
 Who thou art?
 Thou mayst be what I thought,

⁷ Cf. *Job xxxviii*, 12, 29, 31-33:

Hast thou commanded the morning since thy days; and caused the day-spring to know his place?

Out of whose womb came the ice? and the hoary frost of heaven, who hath gendered it?

Canst thou bind the sweet influences of Pleiades, or loose the bands of Orion?

Canst thou bring forth Mazzaroth in his season? or canst thou guide Arcturus with his sons?

Knowest thou the ordinances of heaven? canst thou set the dominion thereof in the earth?

PSALMS OF DAVID

arise, thou stillest them. (Ps. lxxxix, 9.)

Hear me speedily, O Lord:
 my spirit faileth: hide not thy
 face from me, lest I be like
 unto them that go down into
 the pit. (Ps. cxliii, 7.)

PSALMS OF DAVID

Make haste, O God, to
 deliver me; make haste to
 help me, O Lord. (Ps. lxx,
 1.)

Cast me not off in the time
 of old age; forsake me not
 when my strength faileth.
 (Ps. lxxi, 9.)

Hear my prayer, O Lord,
 give ear to my supplications: in
 thy faithfulness answer me,
 and in thy righteousness. (Ps.
 cxliii, 1.)

O turn unto me, and have
 mercy upon me; give thy
 strength unto thy servant, and

PRAYER OF AN AGED INCA

Yet perchance thou art a phantom,
 A thing that causes fear.
 Oh, if I might know!
 Oh, if it could be revealed!
 Thou who made me out of earth,
 And of clay formed me,
 Oh look upon me!
 Who art thou, O Creator,
 Now I am very old? •

PSALMS OF DAVID

save the son of thine handmaid.
 (Ps. lxxxvi, 16.)

Make thy face to shine upon
 thy servant; and teach me thy
 statutes. (Ps. cxix, 135.)

Hide not thy face from me
 in the day when I am in
 trouble; incline thine ear unto
 me: in the day when I call an-
 swer me speedily. (Ps. cii, 2.)

The inclusion by the aged Inca of Tarapacá and Tonapá, subordinate deities, "servants of Uira-cocha," resembles the prayers to the saints and angels in some branches of our own religion.

HYMN OF THE INCA ROCCA

Oh come then,
 Great as the heavens,
 Lord of all the earth,
 Great First Cause,
 Creator of men.
 Ten times I adore thee,
 Ever with my eyes
 Turned to the ground,
 Hidden by the eyelashes,
 Thee am I seeking.
 Oh look on me!
 Like as for the rivers,
 Like as for the fountains,
 When gasping with thirst,
 I seek for thee.
 Encourage me,

PSALMS OF DAVID

The earth is the Lord's and
 the fulness thereof; the world,
 and they that dwell therein.

For he hath founded it upon
 the seas, and established it upon
 the floods. (Ps. xxiv, 1-2.)

I stretch forth my hands
 unto thee: my soul thirsteth
 after thee, as a thirsty land.
 Selah. (Ps. cxliii, 6.)

O God, thou art my God;
 early will I seek thee: my soul
 thirsteth for thee, my flesh
 longeth for thee in a dry and
 thirsty land, where no water is.
 (Ps. lxiii, 1.)

HYMN OF THE INCA ROCCA

Help me!
 With all my voice
 I call on thee;
 Thinking of thee,
 We will rejoice
 And be glad.
 This will we say
 And no more.⁸

PRAYER OF THE INCA TO THE
 CREATOR⁹

PSALMS OF DAVID

O Creator! (O conquering Uira-cocha! Ever present Uira-cocha!) Thou who art without equal unto the ends of the earth! Thou who givest life and strength to mankind, saying, let this be a man and let this be a woman: And as thou	Sing unto God, sing praises to his name: extol him that rideth upon the heavens by his name JAH, and rejoice before him. (Ps. lxxviii, 4.) And he rode upon a cherub, and did fly: yea, he did fly upon the wings of the wind.
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⁸ The Inca hymns given above were discovered by Sir Clements Markham in the National Library at Madrid. They had been written down by a native Peruvian chief named Salcamayhua, who lived near the borders of Collahua, south of Cuzco. Markham was a conscientious student of the Quichua language and devoted the greater part of his life to a scholarly study of the antiquities of Peru. He published these hymns through the Hakluyt Society in 1873 in the original Quichua. They were later published at Madrid by Don Marcos Jimenez in Quichua. Markham says: "The text was very corrupt, the words were misspelt and not divided from each other."

They were later published in 1892 in Spanish, through the instrumentality of Don Samuel A. Lafone Quevedo, who was fortunate enough to secure the assistance of Dr. Miguel Mossi of Bolivia, who, Markham states, was "by far the best modern scholar of the language of the Incas." It is fortunate that these remnants which have escaped from the ruin of the Empire of the Aryan-Incas have been subjected to the scrutiny of such masters of the subject as Markham and Mossi. But, even so, they are far from complete and, it may be presumed, have lost much in the confusion and destruction of the conquest and in the various translations and transcriptions through which they have come. (See Markham, *Incas*, etc., pp. 96-103.)

⁹ The following prayers of the Incas are given in Quichua, as preserved

PRAYER OF THE INCA TO THE
CREATOR

sayest, so thou givest life, and vouchsafest that men shall live in health and peace, and free from danger:—Thou who dwellest in the heights of heaven, in the thunder, and in the storm clouds, hear us! and grant us eternal life. Have us in thy keeping, and receive this our offering, as it shall please thee, O Creator!

INCA PRAYER

O most fortunate and propitious Creator, have pity and mercy upon all men whom thou hast made. Keep thy poor servants in health. Make them and their children to walk in a straight road, without thinking any evil. Grant that they may have a long life, and not die in their youth, and that they may live and feed in peace.

PSALMS OF DAVID

He made darkness his secret place; his pavilion round about him were dark waters and thick clouds of the skies. . . .

The Lord also thundered in the heavens, and the Highest gave his voice; hail stones and coals of fire. (Ps. xviii, 10-13.)

PROTESTANT EPISCOPAL
PRAYER

O Lord, our heavenly Father, Almighty and everlasting God, who hast safely brought us to the beginning of this day; Defend us in the same with thy mighty power; and grant that this day we fall into no sin, neither run into any kind of danger; but that all our doings may be ordered by thy governance, to do always that which is righteous

in native tradition, on page 28 *et seq.*, of Molina's "Fables and Rites of the Yncas," *Narratives of the Rites and Laws of the Yncas*, ed. C. R. Markham (Hak. Soc.), with Markham's English translation.

Of the accuracy of the report and translation of these Inca prayers, Markham says (Introduction to Molina, *supra*, p. xvi): "The translations in the text give the meaning of the Quichua with general accuracy." Markham adds that Molina, who reported them, was a "master of the Quichua language." Molina wrote between 1570 and 1584 while he was "priest of the hospital for natives at Cuzco. . . . He had peculiar opportunities for collecting accurate information. . . . He examined the chiefs and learned men who could remember the Inca empire in the days of its prosperity."

PROTESTANT EPISCOPAL
PRAYER

in thy sight. (Prayer Book, p.
14.)

INCA PRAYER

O Creator! Lord of the ends of the earth! O most merciful! Thou who givest life to all things, and hast made men that they may live, and eat, and multiply. Multiply also the fruits of the earth, the papas and other food that thou hast made, that men may not suffer from hunger and misery. O preserve the fruits of the earth from frost, and keep us in peace and safety.

INCA PRAYER TO THE CREATOR
AND TO THE SUN

O Creator! Thou who gavest being to the Sun, and afterwards said let there be day and night. Raise it and cause it to shine, and preserve that which thou hast created, that it may give light to men. Grant this, O Creator!

O Sun! Thou who art in peace and safety, shine upon us, keep us from sickness, and keep us in health and safety.

PROTESTANT EPISCOPAL
LITANY

O God the Father of heaven: have mercy upon us miserable sinners; . . . That it may please thee to give and preserve to our use the kindly fruits of the earth, so as in due time we may enjoy them.

GENESIS

And God said, Let there be light: and there was light.

And God saw the light, that it was good: and God divided the light from the darkness.

And God called the light Day, and the darkness he called Night. And the evening and the morning were the first day.
(i, 3-5.)

PRAYER FOR THE INCA

O pious Creator, who ordered and saw fit that there should be a Lord Ynca, grant to the Ynca that he may be kept in peace, with his servants and vassals, that he may obtain the victory over his enemies and always be a conqueror. Cut not short his days, nor the days of his children, and give them peace, O Creator!

INCA PRAYER FOR ALL THE PEOPLE

O Creator! (O conquering Viracocha! Ever present [caylla] Viracocha!) Thou who art in the ends of the earth without equal! Thou who gavest life and valour to men, saying, Let this be a man! and to women, saying, Let this be a woman! Thou who madest them and gave them being! Watch over them that they may live in health and peace. Thou who art in the high heavens, and among the clouds of the

PROTESTANT EPISCOPAL

PRAYER FOR THE
KING'S MAJESTY

O Lord, our heavenly Father, high and mighty, King of kings, Lord of lords, the only Ruler of princes . . . Most heartily we beseech thee with thy favour to behold our most gracious Sovereign Lord, King GEORGE; . . . grant him in health and wealth long to live; strengthen him that he may vanquish and overcome all his enemies. (Prayer Book, p. 15.)

PROTESTANT EPISCOPAL

PRAYER "FOR ALL
CONDITIONS OF
MEN"

O God, the Creator and Preserver of all mankind, we humbly beseech thee for all sorts and conditions of men; that thou wouldest be pleased to make thy ways known unto them, thy saving health unto all nations. . . . Finally, we commend to thy fatherly goodness all those who are any ways afflicted, or distressed, in mind, body or estate; that it may please thee to comfort and relieve them, according to their

PROTESTANT EPISCOPAL

PRAYER "FOR ALL

INCA PRAYER FOR ALL THE
PEOPLECONDITIONS OF
MEN"

tempest, grant this with long several necessities. (Prayer
life, and accept this sacrifice, O Book, pp. 43-44.)¹⁰
Creator!

The old pagan sun-gods of the various branches of the Paleo-Aryan race still survive in the great modern religions. The Hebrew and even the Christian God of the Scriptures is largely a solar deity; his place is in the sky; his manifestations, the sun, moon, and stars, the thunder and the whirlwind.¹¹

The worship of the light,—the sky, the glow and majesty of the firmament,—of the old Aryan people was the basis of the religion not only of ancient pagan races. The heaven of the Christian, as of the old pagans, is in the sky among the celestial bodies, the celestial gods. In Christian cathedrals even yet the halo of light appears about the head of Christ and the figure of the sun above the Christian crucifix in the Cathedral of Lima is the same as that of the Incas in the megalithic temple at Cuzco.¹²

¹⁰ In the *Gathas*,—"literally hymns, psalms . . . the oldest part of the *Avesta* . . . the sacred hymns, sayings, or sermons of Zoroaster himself . . . we have the prophet speaking much as does David in the Psalms."—A. V. Williams Jackson, "Avesta," *Johnson's Universal Cyclopædia*.

¹¹ Yahweh was an Arabic god, knowledge of whom was received by Moses from his father-in-law, "a priest of Midian." (Rev. George Foot Moore, "Jehovah," *Encyc. Brit.*, 11th ed.) No doubt, like Abraham, this god had come from "the land of the Chaldees." The Chaldeans adopted the older Accadian or Sumerian religion in large part, along with other features of their culture, including elements of the Sumerian language. E.g., writing was brought to the valley of the Euphrates by the Sumerians 3800 years B.C., or earlier. (Breasted, *Conquest of Civilization*.) Yahweh probably came by this route to the Arabians.

¹² Sun-worship was common to Polynesia as to Asia and America.—Ed-

In the majestic funeral of the late Emperor Yoshihito at Tokio the sun, moon, and stars were carried in the solemn procession of the dead,—the gods with whom he henceforth would mingle.

ward Tregear, "Asiatic Gods in the Pacific," *Polyn. Soc. Jour.*, II (1893). Not only the conception of the sun-god but his name, *Ra*, or *Ré*, was the same in Polynesia and Egypt, both derived, no doubt, from Asia.

XXXVII

EL DORADO AND OTHER MYTHS

"THE belief in an age of happiness . . . in the infancy of mankind, is found among all peoples of the Aryan or Japhetic race."¹ The Greeks and Romans cherished the myth of a primitive Golden Age of peace and happiness.

Such a typical branch of the Aryan race as the virile Scotch-Irish pioneers, who founded the county of Augusta beyond the Blue Ridge in Virginia, in the enjoyment of the religious liberty and material advantages and opportunities of their rich new land, likened this new age of happiness to the mythical "Golden Age." They symbolized it on their county seal by a peaceful pastoral scene,—fat cattle lying in green pastures by quiet waters. Underneath was Horace's line suggesting the ancient mythical time of peace and happiness: "Though backward time should turn to its first golden hours."

The same conception curiously appears in the earliest traditions of western China. "Ch'ien relates how an envoy came in 624 B.C. . . . to the court of Duke Mû of Ch'in, sent by the king of some rude hordes on the west. The duke told him of the histories, poems, . . . laws which they had in the middle states, while yet rebellion and disorder were of frequent occurrence, and asked how good

¹ François Lenormant, *Beginnings of History*.

order was secured among the wild people, who had none of those appliances. The envoy smiled, and replied that the troubles of China were occasioned by those very things of which the duke vaunted, and that there had been a gradual degeneration in the condition of the states, as their professed civilization had increased, ever since the days of the ancient sage, Hwang Tî, whereas in the land he came from, where there was nothing but the primitive simplicity, their princes showed a pure virtue in their treatment of the people, who responded to them with loyalty and good faith."²

In the Celtic branch of the Aryans, the belief in a primitive age of simplicity and virtue appeared in the Arthurian legends. Avalon (Apple-land), the Isle of Paradise in the western seas, was like the ancient Chinese mythical "fairy islands" or "Isles of the Blest" in the eastern ocean, "where the herb of immortality could be gathered,"³—probably based on reports of some of the delectable islands of Polynesia.

The Greek and Irish branches of the Aryan race inherited the same tradition. In the Greek myth the Fortunate Islands lay "near the edge of the Western Ocean, peopled not by the dead, but by mortals upon whom the gods had conferred immortality." Like the Homeric islands of the Phæacians and the Irish Saint Brendan's island in the western seas, they were lands of "perpetual summer and abundance of all good things."⁴

The Spaniards found the legend among the natives of America in the form of stories of a magic land which the

² James Legge, "Lâo-Tsze," *Encyc. Brit.*, 11th ed.

³ James Legge, *ibid.*

⁴ "Isles of the Blest," *Encyc. Brit.*, 11th ed.

Spaniards translated as "El Dorado," and of a "Fountain of Perpetual Youth,"—sought by Ponce de León.⁵

Among a multitude of other features indicating Asiatic influence in American culture, the Mexican game of patolli, corresponding to the Hindu game of pachisi, has been often mentioned. Both games are played in the same way by moving colored stones or disks on the squares of a cross-shaped design in accordance with the fall of marked beans or dice.⁶

Tylor quotes Father Charlevoix as saying (*History of New France*), "There is current also among these barbarians [Algonquins] a pleasant enough tradition of a Great Elk beside whom others seem like ants. He has, they say, legs so high that eight feet of snow does not embarrass him. His skin is proof against all sorts of weapons and he has a sort of arm which comes out of his shoulder which he uses as we do ours." Tylor remarks, "It is hard to imagine that anything but the actual sight of a live elephant can have given rise to this tradition."⁷

⁵ S. Percy Smith cites the resemblance of the Hindu myth of *Vikrama* and *Urvasi* ("The Hero and the Nymph") to its Greek and German counterparts,—Eros and Psyche, and Lohengrin,—as pointed out by Ragozian in *Vedic India*. Smith calls attention to the similar Maori myth of the "Handsome Chief," Te-Niniko, and the *Turehu*, or "Spirit Lady," the "most beautiful of all." In the Hindu myth the condition of the nymph's union with her lover was that she should not see him disrobed. In the Maori story the condition was that the nymph should not be seen by day. In each case (Hindu and Maori) the condition was broken, thus ending the happy union. Smith says ("Aryan Polynesian Points of Contact," *Polyn. Soc. Jour.*, XIX): "Later on we will show that the Polynesian hero Tawihī is no other than the Greek hero Peleus, and that this story was well known to the ancient Aryans and from them spread to (probably) all the nations descended from them, and is still, in somewhat different forms, preserved among the Scandinavians, the North Germans, the Greeks, the Albanians, and the Celtic Irish."

⁶ E. B. Tylor, *Jour. Anthropol. Inst.*, VIII, 116.

⁷ G. E. Smith, *Elephants and Ethnologists*, p. 36.

The curious conception that the earth rests upon the back of a turtle or tortoise, which is ruled over by the sun and moon, is found alike among the Iroquois and the Hindus.⁸

The experiences of the soul as it passes through the four stages of purgatory, realistically described in the scrolls of Japanese Buddhist temples, are depicted in like form in the Aztec *Vatican Codex*, giving the completely identical Mexican idea of the journey of the soul to the spirit land.⁹

No attempt is made in these observations to discuss all of the points of resemblance of race, culture, and language between the peoples who inhabited America before the arrival of Columbus and those of Asia. The relationship is too obvious to require such a discussion for the purpose of these notes. A complete survey of the subject would be a colossal though interesting task which would require an analysis and comparison in special studies along many different lines. On many of the most important points these special studies do not exist. Comparatively little examination has been made of these resemblances in the field of Ethnology, or of Anthropology, or of Archeology, and especially little,—in most cases none at all,—in that of Philology.

Little attention has been paid to Peru, though much illuminating study has been given of late years by able men to the remains of Mexican and Mayan civilizations. But this study has been concentrated on the field itself and little has yet been done in the way of comparison with the

⁸ Hopkins, *The Religions of India*, cited in G. E. Smith, *supra*. Cf. illustration *ante*, opp. p. 111.

⁹ E. B. Tylor, *Mythical Beliefs as Evidence in the History of Culture*, cited by G. E. Smith, *E. & E.*, p. 35.

races and cultures of Asia. Most of the work in fact has been done by men who know little of the latter, and those who are familiar with primitive Asiatic cultures,—following an unscientific dictum, based on *a priori* reasoning from mistaken premises,—not only close their eyes to proof of such relationship but have precluded any inquiry into the subject by the scholastic statement that such a connection is impossible.

This state of affairs has been made worse by what amounts almost to a fad,—induced by the high standing of some of its advocates,—in the tendency to claim that cultures are of local and independent origin, however great their resemblance may be to others in other parts of the world.

The concentrated attention of specialists directed to the minute particulars of local cultures is as essential as is the microscope in the study of the structure of substances; but in order to form a conclusion as to the origin and relationship of things, it is necessary to take a more comprehensive view.

XXXVIII

THE TREE OF THE FORBIDDEN FRUIT

THE movement of races from Asia to ancient America and early migrations of tribes southward from Mexico can be traced in a measure by the identity of archaic folk-myths. The Garden of Eden, the forbidden fruit, the creation of woman and her conception by eating the fruit of a certain tree,—myths, common in various forms to the early Aryan races,—had reached Central America and Peru some thousands of years before Columbus discovered the Western Continent.¹

The Toltec tradition told of the ancestors coming from *Tula* or *Tolan*, “the paradise of the earth,” a land of riches and plenty. It abounded in gold, silver, and precious stones. There were beautiful flowers of every color,—“the aromatic rose *teunacaxtli*, the tree *ulli* from which can be gathered the black gum, and the rose *xiloxuchitl*.” In this garden land grew the best *cacao*, and

¹ The long migrations from Asia to the east by the sea planted Asiatic myths throughout the Pacific.

The connection of the dog-star and the deluge in Asiatic, Greek, and Egyptian myth has its reflection in New Zealand; also the myth of the maiden who became pregnant by the god (in New Zealand, the sun). The myth of the “water of life” was known in Polynesia as in Asia and America. *Hina* (the Maori moon-goddess), when the moon dies “goes to the ‘Living Water of Tane,’ to the great lake of Aewa—to the water which can restore all, even the moon to its path in the sky.” Edward Tregear, *Polyn. Soc. Jour.*, II, citing White’s *Ancient History of the Maori*, I, 142. Maori cosmogony (translation by Hare Hongi, *Polyn. Soc. Jour.*, XVI [1907], 113) is substantially like that of Genesis.

every kind of food in profusion. Birds of brilliant plumage filled the air with melody. The soil was exceedingly fertile. "The calabashes were three feet in diameter and the ears of corn so large that they could scarcely be lifted. The herbs grew as high as trees." Cotton did not need to be dyed as it grew naturally in every color. "Great rivers fell from the encircling mountains and watered the land."²

Before the Toltecs left their cradle-land of Tula, seeing that "the new creatures [men] had attained understanding and saw all that existed in the four quarters of the heaven and of the earth, their creators repented of having given them so much wisdom, for they had become as wise as the gods themselves. 'Their vision is too far-reaching,' said the gods; 'if their sight is not shortened they will become the same as gods.' The gods then consulted among themselves and blew a cloud before the men's eyes." Then to console the new beings whom they had made and whose understanding they had limited in this way, the gods threw the men into a deep sleep, "so that when they awoke each one found by his side a beautiful woman for a wife."³

Because he had rebelled against the King of Tolan, the Prince Hunhun-Ahpu⁴ was beheaded and his head was placed on a tree in the road, as a warning to rebels. The head of the Prince miraculously disappeared and immediately in its place the tree was filled with fruit. The King of Tolan ordered that this "marvelous tree" should

² Brasseur de Bourbourg, *Popol Vuh* (Paris, 1861), pp. clii, cliii.

³ *Id.*, p. cliv. Cf. Genesis ii, 9-10, 21-22.

"In this exceedingly curious passage" of the *Popol Vuh* (the "sacred book" of the Quichés), remarks Brasseur, "one would think he was hearing a conversation of the divine beings (elohim) of Genesis."

⁴ Note the mixture of Aryan and Mongolian names.

not be touched, and decreed the heaviest penalties for the disobedience of this order.⁵

"But the King had a daughter named Xquiq [a name said to signify woman's blood]. Led by curiosity, she left the mountains [of paradise] and went to this tree in the hot lowlands, with the intention of taking some of its fruit in spite of the King's prohibition.⁶ The voice of Hunhun-Ahpu called to her and asked her what she wanted. When she answered he told her to hold out her arm, and spat into the hollow of her hand. The spittle disappeared immediately; but in the same instant the girl felt that she had become pregnant.

"On her return to her father's home her plight soon became apparent, and, on her persistent refusal to make avowal of her crime, she was condemned to death by the supreme tribunal of the empire. Xquiq found a way of escaping her father's vengeance by winning over the executioners, and she fled to the home of the mother of Hunhun-Ahpu, to whom she presented herself as her daughter-in-law." She soon gave birth to the twins, Hun-Ahpu and Xbalanqué, "whose sagacity and prudence, as they grew up, soon aroused the jealousy of their older brothers, Hun-Batz and Hun-Chouen."⁷

These legendary heroes and demigods and their relations represent not only the mythical chieftains themselves but the primitive tribes over which they ruled, and picture forth, in a vague way, the intertribal wars.

In Peru the beautiful divine princess *Cavillaca* ate the delicious fruit of the *lucma* tree which the amorous god

⁵ Cf. Genesis ii, 17.

⁶ Cf. Genesis iii, 6.

⁷ *Popol Vuh*, p. cxxxvi.

Coniraya-Viracocha, disguised as a very beautiful bird, let fall at her feet.⁸

The *Yuracares*, of Carib-Caucasian blood, in the interior of South America, told of the *Ulli* tree, most brilliant of all the trees of the forest, which changed itself into a man at the entreaty of a young girl. She became a mother in a marvelous manner, giving birth to *Tiri*, "who took from his bosom the female of the jaguar."⁹

⁸ Francisco de Avila, in *Narratives of the Rites and Laws of the Yncas* (Hak. Soc.), ed. C. R. Markham, p. 125.

⁹ *Popol Vuh*, p. ccvi. "*Uitzilopochtli* [Mexican god of war] was begotten by immaculate conception."—Denison, *Mex. Ling*, p. 157.

XXXIX

RELIGION IN THE DAILY LIFE—THE PASSOVER

THE true character of the Inca-Quichua people cannot be understood without realizing the intimate extent to which *Religion* entered into their lives. As a people they were far more religious than we are. This is true of most primitive people, like the early Jews; but with the Incas religious observances had been developed into a refined and complicated ritual which dwarfed in its overwhelming and constant presence every other consideration of men's lives.

There was not only such a union of "Church and State" as made the two practically identical; but a deeply religious and consequently spiritual significance directed and colored every action and enterprise from the humblest daily domestic affairs to the greatest undertakings of the Government.

The Inca himself, and consequently his Government, was divine. The great sun dials, or intihuatanas, on the high-places of worship "tied" the whole life of the people to the movements of the god sun which the intihuatana recorded with the utmost exactness.

God was manifest in his works in the same manner as expressed in the Scriptures we have inherited from the Jews:

"The heavens declare the glory of God; and the firmament sheweth his handywork."

It is a tribute to the grandeur and appeal of the religion of Jehovah (Yahweh) and to the power of its priests and apostles that it was retained even in the new dispensation of Jesus Christ; and the great Anglo-Saxon races of Europe and America give praise to the "Lord God of Israel" for his promise "to perform the oath which he swore to our forefather, Abraham."¹

In Peru the sowing and reaping of crops, the preparation of the daily food, all family events, birth, marriage, and death, barter and trade, the care of cattle, travel, the division of labor and specialization of occupation were all subject to the immanent presence and interposition of the god. Prayers to *Viracocha*, to the *Sun*, to the *Family Ancestor*, to the family or individual *Totem*, were constant.

Each individual had his fetish or totem,—a personal god,—which represented in a mystic way the great father of all, and which he usually carried with him for his protection. That of the Inca was the Sacred Falcon, or even the Sun itself. The magic influence of the Totem was used in intercession with the father god in behalf of those especially under its protection.

There were many temples dedicated to special "gods" or totems,—whose mystic powers were special and local manifestations of *Viracocha*,—the "Great Spirit" of the North American Indians.²

Nothing was more expressive of the intimate penetra-

¹ Prayer Book, "Benedictus," Luke i, 68, 73.

² These local homes of the Spirit—often simply natural "*high-places*" on which open-air altars had been built—were called *huacas*: such were the *huacas* of *Chuqui-Chanca-Uiracocha*, in Huaypau; of *Apotin-Uiracocha* in Amaybamba; and of *Atun-Uiracocha* in Urcos. Molina, "Fables, etc.," *Narratives of the Rites and Laws of the Yncas*, p. 29.

tion of the Divine Spirit into the homes of the people than the ceremony of the "Sacred Fire,"—when a new fire was kindled by a reflecting mirror from the autumnal sun as it turned towards the winter solstice. (Festival of *Mosoc Nina*, in the month of Pacha Pucuy, March 22-April 22.) This pure flame was carried by swift runners to the altars where the old fires had been extinguished. New fires were lighted on the family hearthstones from the same sacred flame directly from the sun. Naturally the intimate life of the family, which is centered around the family fire, felt its spiritual effect.

Many of the Inca religious ceremonies were superb spectacles and highly organized. The feast of *Situa* in the latter part of August,—the beginning of the Andean spring,—will serve as an example. It was the Inca Pass-over and the sacred food (*sancu*) was eaten in humility and purification of spirit. It contained many of the elements of the Lord's Supper. A solemn ritual was observed in an appeal to the "Creator" to "Drive out Evils from the Land!"

Troops of men armed and accoutered for war formed in the central square of Cuzco and marched from there to the front of the temple. The golden idols of the Thunder, of the Creator, and of *Huanacauri* (the Original Ancestor) were brought from their temples to the temple of the Sun. The priests of "these Huacas" joined the assembly and the Chief Priest of the Sun proclaimed the feast.

At the beginning of the feast in Cuzco, "all the people, great and small, came to their doors crying out, shaking their mantles and *Uicllas* (cloaks), and shouting, "Let the

Evils be gone! How greatly desired has this festival been by us! O Creator of all things, permit us to reach another year, that we may see another feast like this!" Before proceeding with the sacred ceremonies, all strangers, all deformed persons, and all of those "whose ears were broken" were sent out of the city. "They also drove out the dogs that they might not howl."³

The people gathered in the great square and four hundred armed men assembled about the urn of gold "like a fountain," which stood in the center of the square. The armed men were divided into four companies of one hundred each, each company facing toward one of the great divisions of the empire.

As the procession arrived from the temple bearing the *huacos* (idols), and crying, "Go forth, all Evils!" the companies of one hundred armed men each, who had been carefully selected from certain lineages, ran swiftly on the roads leading to the four *suyus* (the divisions of the empire), crying, "Go forth, all Evils!" This cry was taken up by the people settled on the several roads and passed from tribe to tribe into the distant parts of the empire.

The *huacos* (the idols of the Thunder, the Creator, and of *Huanacauri*) were brought on litters and placed on the golden benches prepared for them in the square. The mummies of the dead lords and ladies, richly adorned, and each one in charge of a person of the same lineage (as the deceased), were brought out and arranged around the Plaza. The entire people came out "according to their tribes and lineages and richly dressed as their means

³ Molina, pp. 21, 23, 24.

would allow." The Inca himself was with them, and with much feasting and drinking they danced in the square.

At dawn "they went to the rivers and fountains to bathe, saying that their maladies would come out of them. Having finished the bathing they took great torches of straw, bound around with cords, which they lighted; and they continued to play with them, passing them from one to another. They called these torches of straw *pancurcu*. On the second day they continued their feasting. "Having made reverences to the Creator, the Sun, and the Lord Inca, they sat down on their benches, each man according to the rank he held, the Hanan-Cuzcos being on one side, and the Hurin-Cuzcos ⁴ on the other.

"They passed the day in eating and drinking and enjoying themselves and they performed the (dance) *tauqui*, called *alan situa saqui*, in red skirts down to their feet and garlands, called *pilco casa*, on their heads,⁵ accompanied with large or small tubes or canes which made a kind of music called *tica-tica*. They gave thanks to the Creator for having spared them to see that day and prayed that they might pass another year without sickness; and they did the same to the Sun and to the Thunder. The Inca came with them having the sun [the golden *huaco*] before him. He had a great vase of gold containing chicha. It was received by the priest, who emptied it into the urn which, as has been said, is like a stone fountain plated with gold."

Herds of llamas were sacrificed. "It was necessary that

⁴ Upper and Lower Cuzco.

⁵ The practice of wearing garlands of flowers on their heads in their great festivals, like many other ancient customs of the Incas, is still kept up by the Quichua Indians in the valley of the Vilcanota.

they should be without spot or blemish, with fleeces that had never been shorn." "The priest of the Sun selected four of the most perfect and sacrificed them in the following order,—one to the Creator, another to the Thunder, one to the Sun, and one to *Huanacauri*. When the sacrifice was offered up the priest had the *sancu* [a blood pudding made with meal] on great plates of gold and he sprinkled it with the blood of the sheep.

"The white fleece-bearing sheep were called *cuyllu*; and the plates containing the *sancu* were in front of the bench of the Sun. The High Priest then said in a loud voice so that all might hear: 'Take heed how you eat this *sancu*, for he who eats it in sin and with a double will and heart is seen by our Father, the Sun, who will punish him with grievous troubles. But he who with a single heart partakes of it, to him the Sun and the Thunder will show favor and will grant children and happy years and abundance with all that he requires.'

"Then they all rose up to partake, first making a solemn vow before eating the *yahuar-sancu*, in which they promised never to murmur against the Creator, the Sun or the Thunder; never to be traitors to their Lord, the Inca, on pain of receiving condemnation and trouble."

One can easily imagine the sanction which this gave to the ruler's authority.

It is interesting to note that the best food which could be prepared was presented to the temples of the Sun, the Creator, and the Thunder; "which the priests of these *huacas* received and consumed." The sacrificial intoxicating chicha brought by the Inca in his golden vase was also received by a priest who poured it into the great gold-

plated urn as a libation to the gods. However, great pains had been taken to provide secret channels under the urn through which the chicha flowed to the temples where no doubt the priests were waiting for it.⁶

The festival concluded with the eating of the consecrated food. "The bodies of the sheep were divided and distributed as very sacred things, a very small piece to each person." During the process of the distribution of the sacrificial matter, the priests offered prayers to the Creator, to the Sun, and to the Thunder, which have elsewhere been compared to the Psalms of David and of Ikhnaton.

The women "ate and drank their food with much enjoyment; and every person, however poor, was to eat and drink for they said that on this day they should enjoy themselves if they had to pass all the rest of the year in labor and sorrow. On this day no man scolded his neighbor, nor did any word pass in anger, nor did anyone claim what was owing him from another. They said that there would be trouble and strife throughout the year if any was commenced on the day of the festival."⁷

"The priest of the Sun took what he could hold [of the sacred mass or *sancu*] on three fingers, put it into his mouth and returned to his seat. In this order and in this

⁶ Molina, "Fables, etc.," *Narratives of the Rites and Laws of the Yncas*, pp. 22-28.

There was evidently chicanery among the Inca priests as among some of those of modern Peru. A gentleman told me of having seen, in a remote village of northern Peru, miserable *cholos* collecting with spoons drops of alleged "bloody sweat" from an image of Christ, to be used as a magic cure for their ills; while behind a curtain a priest was busily pouring a colored liquid into the hollow porous figure. My friend expressed some curiosity as to this procedure. The priest only shrugged his shoulders and remarked, "We must live!"

⁷ Molina, *supra*, p. 24.

manner of taking the oath all the tribes rose up and thus all partook down to the little children. They all kept some of the *yahuar-sancu* for those who were absent and sent some to those who were confined to their beds by sickness; for they believed it to be very unlucky for anyone not to partake of the *yahuar-sancu* on that day.⁸ They took it with such care that no particle was allowed to fall on the ground, this being looked upon as a great sin."⁹

Sancu was also put upon the lintels of their doorways and places where their food and clothes¹⁰ were kept. "The principal Inca lord and his wife, after they had finished their bath, put some of the *sancu* in their house and on their hands. Afterwards they placed certain plumes on their heads of a bird called *pialco*, which are of a changing color. The same was done with the figure of the Creator and those who had charge of it called this ceremony *Pilcoyacu*."

The resemblance of this spring festival of the Incas to that of the Passover and to the sacrament of the Eucharist, as well as to sacramental spring festivals in Babylonia, Arabia, and other Asiatic countries is obvious.¹¹

⁸ Compare this with the "Reservation of the Eucharist" in our own Church.—"Eucharist," *Encyc. Brit.*, 11th ed.

"The Eucharist being the seal of Christian fellowship, it was a natural custom to send portions of the consecrated elements by the hands of the deacons to those who were not present."—Justyn Martyr, *Apol.*, i, 65.

"There appears to be more evidence than is commonly supposed to show that a practice analogous to that of Justyn Martyr's day has been adopted from time to time in England, viz. that of conveying the sacred elements to the houses of the sick during, or directly after, the celebration in church."—William Edward Collins, Bishop of Gibraltar, "Eucharist," *supra*, p. 877.

⁹ Molina, p. 28.

¹⁰ Molina, p. 24.

¹¹ Matthew, Mark, and Luke identify the Lord's Supper with that of the

Passover.—F. C. Conybeare, "Eucharist," *Encyc. Brit.*, 11th ed., citing Mark xiv, 22-25, Matt. xxvi, 26-29, Luke xxii, 14-20.

It was "only the pervading sense of brotherhood and love" which "constituted the meal a Lord's Supper." *Ibid.* The purity of the *unblemished* sacrifice is attained by him who partakes of its blood in spirit and in truth. "This cement [the sacred food] is nothing else than the actual life of the sacred and kindred animal, which is conceived as residing in its flesh, but specially in its blood, and so, in the sacred meal, is actually distributed among all the participants, each of whom incorporates a particle of it with his own individual life."—W. Robertson Smith, *Religion of the Semites*, quoted by F. C. Conybeare, *supra*.

"The general sense is clear, that those who consume the holy food without a clear conscience, like those who handle sacred objects with impure hands, will suffer physical harm from its contact . . . We must separate ourselves before eating it from all that is guilty and impure. The food that is *taboo* must only be consumed by persons who are equally *taboo* or pure. If they are not pure, it condemns them."—F. C. Conybeare, *supra*.

All these,—the expulsion of strangers and deformed persons, the sprinkling of the *sancu* on the lintels of the door posts, the purification of the body by bathing before partaking of the sacred food, the humility of spirit and the charity towards all with which it was to be eaten, the universal participation, even by the children, the general spirit of good will which accompanied it, and the careful selection of the unblemished animal for the sacrifice, which characterized the *situa* of the Incas,—identify it with the Asiatic rites.

"The primitive character of the feast . . . is recognized by all inquirers."—Joseph Jacobs, "Passover," *Encyc. Brit.*, 11th ed.

The seventeenth month of the Mexicans was *Panquetzalisli*,—from the twenty-fifth of November to the fourteenth of December. The name was taken from that of the "banner of *Huitzilopochili* carried in the procession which took place at this time in the famous feast of *Teocualo*, or of the *God eaten by the faithful*, in the form of maize meal kneaded with blood."

Alexander von Humboldt, *Vues des Cordillères* (Paris, 1816), I, 352.

XL

THE ENCHANTED FALCON AND THE SACRED ARK OF THE PERUVIAN AYARS

"A visitor will several times see [in the Rhodes House at Oxford] the strangely erect figure of a carven bird worked into the architectural or decorative scheme. It surmounts the dome of the great hall and is perched upon rails and posts. It is the Zimbabwe bird, found in the ancient ruins called by that name in Rhodesia. It is a symbol of the ancient country Rhodes opened up and held for his empire scheme; it is every bit as strange and foreign as the country itself."

C. B. PALMER, in *Boston Transcript* (quoted in
Literary Digest, July 20, 1929).

THE serpent and the vulture,—so conspicuous as attributes of the god pictured on the monolithic gate of Tiahuanaco and the Chavin stone of Peru,—were likewise the sacred insignia of the Pharaohs and were found on the mummy of Tut-Ankh-Amen. The falcon god of light had been taken from the parent home of the primitive Proto-Aryan stock on the Asiatic plateau to America as well as to Egypt and India.

Vishnu, god of the sky of the Hindus, had the head and wings of a falcon or eagle—the body and limbs of a man, like the worshipping deities carved upon the stone at Tiahuanaco.¹ Ré, the sun-god of the Egyptians,—“father of gods and men,”—was at times identified with Horus, god of the horizons, and like the latter was depicted as a falcon.²

¹ “Vishnu,” *Encyc. Brit.*, 11th ed. Both the falcon and the serpent were conspicuous on the walls of Chan-Chan.

² A. H. Gardiner, “Egypt, Ancient Religion,” *Encyc. Brit.*, 11th ed.

The Ayar, Manco Ccapac, the mystical founder of the Ayar-Inca line, when he set out from Paccari-Tampu, took with him his fetish or sacred totem,—“a bird like a falcon, called *Indi*.”³

Markham⁴ calls this falcon the “familiar spirit” of Manco Ccapac and likens the name to “*Ynti*,” the Peruvian sun-god. It was doubtless the same as *Indra*, the sun-god of the Indo-Aryans.

Manco Ccapac kept this divine bird “in a covered hamper of straw like a box, with much care” and told the people that it was sacred, “some say an enchanted thing, for they thought that this bird made Manco Ccapac their lord and subjected them to follow him.” They feared and worshipped this sacred falcon. Manco Ccapac “left it as an heirloom to his son and the Incas had it down to the time of the Inca Yupanqui.”⁵

The traditions received directly from the Incas relate that the Ayar Mayta Ccapac, the *Hercules* of the Inca legend, “dared to open the hamper containing the *Indi*,” and had conversations with the enchanted falcon and receive oracles from it. “The predecessors of Mayta Ccapac had always kept it shut up in a hamper or box of straw,—such was the fear that they had of it,—but Mayta Ccapac was bolder than any of them. Desirous of seeing what his predecessors had guarded so carefully, he opened the hamper. . . . They say that after the interview with the bird, he was wiser and knew better what he should do and what would happen.”⁶

³ Sarmiento, *History of the Incas* (Hak. Soc.), p. 48.

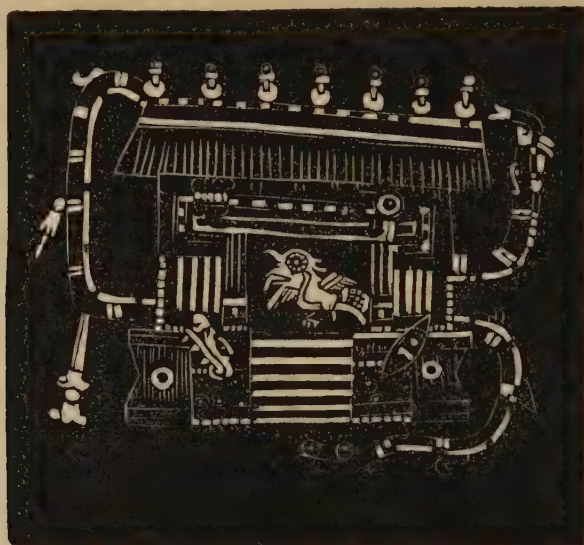
⁴ Note to Sarmiento, *supra*, p. 48.

⁵ *Ibid.*, p. 48.

⁶ *Ibid.*, p. 68.

Quite recently (1925) Commander Dyott in his search for Colonel Fawcett observed in the center of the plaza of an Indian village in the remote

At the place where Manco Ccapac first saw the rainbow and announced to his followers that it was a good omen, he later bemoaned the loss of his brother and sister, who



"The Aztec Rain God as a highly conventionalized drawing of an elephant transmuted into a turkey-cock, standing under a canopy that is suggestive of the regal stands familiar in ancient Egyptian and Babylonian pictures. (From the Vatican Codex after Seler.)"

From Smith, "Elephants and Ethnologists."

Evidently this is the sacred ark, common to the East, which had likewise been brought to Mexico, containing the divine bird, originally the *falcon*, as in the sacred "hamper" or ark, of Manco Ccapac, and its god falcon, in Peru.

had fallen under the influence of an evil spirit. The tradition was that "the rainbow strengthened him and

interior of Brazil a conical lodge of upright poles in which the natives kept some sacred object.

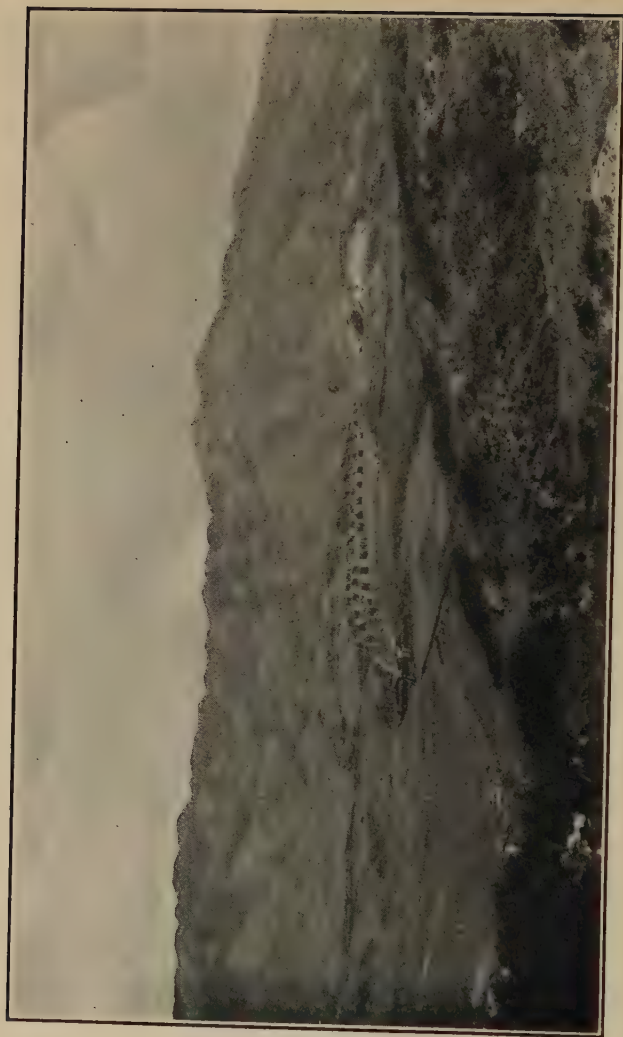
With much difficulty he persuaded the natives to allow him to look inside. On doing so he saw that the object of veneration was a harpy eagle, —evidently worshipped by the tribe.

Commander Dyott succeeded in taking a photograph of the divine bird.



PEDESTALS OF THE DIVINE FALCON OR EAGLE ON THE HUAMAN-TIANA (HOLY PLACE OF THE FALCON) AT CUZCO

In the left center appears a section of Sacsahuaman—the Falcon Fortress—dedicated to the sacred bird whose idols stood on the pedestals facing the fortress; *sacsa* (fill thyself)—*huaman* (falcon)—an offering to the god-bird of the mighty work. At the foot of Huaman-tiana, on the left, is a bit of the smooth plain between the fortress and the temple. Here the people assembled for their exercises and worship. In the background are the grass-covered mountain llama-pastures which rise above the valley of Cuzco.



SACSAHUAMAN AND THE RODADERO

The former in the center of the picture. The latter is the white rock in the right middle ground. Details on the preceding page.

removed all his troubles and afflictions.”⁷ The place was called *Huayna Captiy*. Afterwards a well-carved stone vulture was placed on this spot by one of the successors of Manco Ccapac and was worshipped by the Indians as the omen of good fortune,⁸—no doubt as the totem or *Huanqui* (mystical brother) of the rainbow.

Sacsahuaman, the stupendous megalithic fortress on the hill above Cuzco, was dedicated to the falcon god,—as its name indicates.⁹ Markham says the site of the great fortress was also known in the earliest times as Huaman Tiana (the Falcon’s Throne);¹⁰ but it is more likely that this latter place-name refers to the rounded limestone ledge facing Sacsahuaman from the other side of a small flat plain, a few hundred feet in width. This is now called by the tourists’ guides the “Rodadero.”

The smooth entablatures cut into the rock with marvelous grace and precision, falling in a symmetrical series on either side of the larger pedestal at the top along the balanced curve of the rock, are called, in the language of the guide books, the “Inca’s Throne.” It is more likely that this was the Falcon’s Throne or sacred seat (Huamantiana). Idols of the divine falcon no doubt stood on these artistic pedestals so beautifully cut in the living rock and facing across the small parade ground the matchless fortress dedicated to the falcon god. Huamantiana was a typical altar and huaca of the Ayar-Incas,—open to the sun, the thunder, and the rain,—the native rock, on its sightly

⁷ Molina, *supra*, p. 75.

⁸ Markham, note on Molina, *supra*, p. 75.

⁹ E. G. Squier gives it as “Fill Thee Falcon!”—*Peru: Travel, etc., in the Land of the Incas*, p. 464.

¹⁰ Note to Molina, *supra*, p. 76. A more literal translation would be, The Holy Place of the Falcon.

eminence, carved with man's art as his homage to the Creator of them all.

The falcon god was invoked throughout the most essential and sacred ceremonies of the Inca ritual. On the summit of the hill Raurana near Cuzco was an altar; and on the altar were two stone falcons. After the youths had received the insignia of manhood and membership in the five orders of the noble caste, they and their relatives assembled at this huaca. They passed the night at the foot of the hill in a place called *Huamancancha*,—the "Place of the Falcon." At dawn they ascended the hill.

The Emperor Inca attended in person and gave the youths pieces of gold and silver, red mantles with blue tassels, plumed diadems, and other marks of distinction. Sacrifices were offered upon the falcon altar and prayers were made to the Creator, the sun, the moon, and the thunder. This was followed by much feasting with music and dancing.¹¹

In the following month the newly initiated youths fought a sham battle with slings in the central square of Cuzco. The "youths of Hanan Cuzco hurled against those of Hurin Cuzco."¹² With gorgeous pageantry,

¹¹ Molina, *supra*, pp. 43-44; Markham, *Incas*, etc., p. 132.

¹² Molina (p. 47) says: "At times they came to close quarters . . . until the Ynca, who was present, rose up and restored order." Elsewhere it is said that the fight was so animated that many of the youths were injured and some even killed. Like many of the ancient ceremonies of the Incas, this custom still prevails in some places in Peru,—as at Lamas.

The division into the "lineage" of Hanan and that of Hurin dates back to Rocca, the first descendant of the line of the Ayar Manco to be called Inca, and is of more or less mystical origin. Rocca ordered that his own descendants, together with the members of five other tribes, or Ayllus, which he named, "should be Hanan Cuzcos and settle in the upper part of the city." Markham suggests that possibly these tribes had supported Rocca in his revolution and reforms. "The other five original *ayllus*" together with

music and dancing, all the idols were then brought into the square, the mummies of Hanan Cuzco and Hurin Cuzco were ranged on their respective sides and a great feast was held.

For some days after this the people worked on their *chacras* (farms) and the series of fiestas and ceremonies was closed at the end of the month of January, with the throwing into the little river of Capimayu, which flows through the center of the city, of food, clothing, gold and silver, llamas, flowers, royal plumes, and fringes (*borlas*) and "the ashes and cinders of all the sacrifices throughout the year," as a thankoffering to the Creator for the blessings they had received during the year.

In the ravines above, dams had been constructed to hold back the water. These were now broken in succession and the torrent carried the sacrifices down the stream. The sacrificial gifts were followed by the people to the bridge at Ollantaytambo and there two bags of coca were thrown in the water as the sacrifices floated past. A few runners followed the sacrificial offerings as they were rushed down the beautiful current of the Vilcanota. When those who had followed furthest returned, they brought in their hands "*lances and falcons made of salt*,"¹³ as though by

"the descendants of Rocca's predecessors were all to be Hurin Cuzcos, and to live in the lower part of the city." Markham gives the names of the several tribes (*Incas*, etc., p. 65). This arbitrary division recalls to mind the Urim and Thummim of the Jews. There are some indications that it was a division of *color*.

Molina, *supra*, p. 76, says that the names of these two divisions were taken from the names of two springs of good water. Markham suggests very reasonably that this division of the people "was connected in some way with the military exercises." The Inca Rocca reestablished the old military drills and discipline and the purpose of the division in inciting the rivalry and ambition of the warriors appears in the sham battles.

¹³ Molina, *supra*, p. 51. (Italics mine. M. P.)

these emblems of the god they had brought his acceptance of the offerings for blessing and protection of the people for the coming year.

The Asian-Aryan falcon god of the sun,—the sky, the light,—accompanied the Ayar rulers of Peru. It was the hawk of the Rig-Veda, brought to America by the white Arya chiefs in their migrations by the islands of the Pacific. The sacred falcon *Indi* bore substantially the same name in India. "*Indra was a hawk . . . 'being well-winged, he carried to men the food tasted by the gods.'*"¹⁴

Indra not only was the Hindu god of the sun,—lord of the sky and light, controlling the thunder and the rain,—but came to be the "patron deity of the invading Aryan race, . . . the god of battle to whose help they looked in their struggle with the dark aborigines."¹⁵ *Indi*, the enchanted falcon, was the guide and counselor of the Incas in their warlike migrations,—the totem carried with them in a sacred hamper, as the Israelites carried the holy "Ark of the Covenant."¹⁶

In the migrations and worship of the Hebrew tribes, the Ark was "the permanent pledge of Yahweh's gracious presence; it guides the people on their journey and leads them to victory. It is no mere receptacle, but a sacrosanct object as much to be feared as Yahweh himself." And the ark, like the sacred hamper of the Inca rulers, may have contained the enchanted symbol or the totemic

¹⁴ Rig-Veda, iv. 26, 4. Andrew Lang, footnote to "Mythology," *Encyc. Brit.*, 11th ed., XIX, 142.

¹⁵ A. A. Macdonell, *Vedic Mythology*.

¹⁶ *Tebah*—the Hebrew word translated in the Latin *arca*, chest (the ark of the English Bible)—is also used in Exodus ii, 3, for a "box made of bulrushes" (the same as the Inca "hamper of straw like a box"), in which the infant Moses was found "in the flags by the river's brink."—S. A. Cook, "Ark," *Encyc. Brit.*, 11th ed.

familiar spirit of the god. "Whether the ark originally contained some symbol of Yahweh or not has been the subject of much discussion. Thus, it has been held that it contained stone fetishes (meteoric stones and the like) from Yahweh's original abode on Sinai or Horeb. . . . Others have regarded it as . . . a receptacle for sacred serpents."¹⁷

The hamper of Manco Ccapac, with its falcon idol, *Indi*, the "familiar" of the Peruvian Ayar leaders which guided them in their migrations and conquests, was evidently from the same Asiatic origin as the Jewish ark and the totem of the Aryan falcon god, carried in the migrations of the Aryan race east as well as west and south.

The same Proto-Aryan mystic trust in the sacred falcon or eagle which the Ayars carried to Peru was inherited by our own Aryan race, and appears today in the eagle as our national emblem. The Aztec eagle crushing the serpent represented the same tradition; likewise the eagle standards which the Romans carried as an appeal to fortune at the head of their legions. By the same token the eagle

¹⁷ "The ark represented in some way or other the presence of Yahweh and . . . the safety of his followers depended upon its security (analogies in Frazer, *Pausanias*, x. p. 283). . . . When a people migrate they may take with them their god, and if they conceive him to be a spiritual being who cannot be represented by an image, they may desire a symbolical expression of or, rather, a substitute for his presence."—S. A. Cook, "Ark," *Encyc. Brit.*, 11th ed., II, 550.

"A critical examination of the history of the Israelite ark renders it far from certain that the object was originally the peculiar possession of all Israel."—Cook, *ibid.*

"Remembering the ark which the Jews dragged along on their flight from Egypt, they had stolen it from an Egyptian temple and it was no other than the ark of the god Amon. Now, according to the Bible's own version, that ark struck down dead hundreds of priests and Levites who dared to approach it too closely. It must surely have been charged with an accumulation of forces unknown to us today."—J. C. Mardrus.

is emblazoned upon the coats of arms of the Huns and Germans.¹⁸

¹⁸ "And so the ancients glorified him. . . . How far back into history the eagle goes as a symbol it would be hard to say. Unquestionably he had led great armies into battle centuries before the Persians bore him perched upon their spears at the battle of Cunaxa. He was the emblem of the ancient kings of Babylon and of Syria, of the Ptolemies of Egypt, and of Heliopolis, the famous City of the Sun. . . .

"The eagles of Rome were part, a vital part, of Rome's invincible tradition. They were not merely symbols, standards; they were veritable gods of war. Housed in a chapel in the camp, the eagles of the Roman legion received, with the other deities, the worship of the soldiers; it was more than ignominious, it was impious, to abandon them in the hour of danger. The eagle was not only 'the Roman Bird,' he was also 'the Bird of Jove.' He was . . . indispensable in that extraordinary ceremony, the apotheosis of the Roman emperors. From the topmost point of the blazing funeral pyre, Herodian tells us, as from a pinnacle, an eagle was let loose to soar into the sky and carry the emperor's soul to its abode among the gods.

"From Byzantium, and no one knows how much farther east, to the land of the ancient Irish kings, the eagle was honored and sung. Charlemagne found in the double-headed eagle, symbolizing the junction of the Roman and Frankish Empires, the most admirable emblem of his sovereignty, and it was this eagle of Charlemagne that provided the idea for the eagles of Russia, Austria, and Prussia. A thousand years later, when a new Charlemagne ruled as Emperor of Europe, the eagle became once more, as in the days of Rome, a vital part of an invincible legend—the legend of Napoleonic France. Nobody knows how many thundering charges triumphed, how many great battles were won, because the Eagles of France were as real, and as glorious, to the soldiers who marched under them as, twenty centuries earlier, the Eagles of Rome had been to the legions of those ancient days.

". . . The eagle has become much more than a bird. He is himself a legend, almost a demigod of nature; for his great past, all that he has symbolized in history, is there in our minds when we see him, and it is there whether we are individually conscious of it or not.

"It was present in the minds of the Congress of the United States on June 20, 1782. On that date a design for a national coat of arms was approved by Congress."

Herbert Ravenel Sass, *American Magazine*.

The action of Congress was only a formal recognition of the sacred bird of Manco Ccapac, of the Iroquois, and the Sioux.

The Aryan eagle, for centuries before the American Congress was organized, had been the emblem of sovereignty in America.

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